

BEFORE THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA

Columbia, South Carolina

HEARING #18-11711

APRIL 3, 2018

10:30 A.M.

DOCKET NO. 2017-292-WS:

CAROLINA WATER SERVICE, INC. – Application for Approval of an Increase in Its Rates for Water and Sewer Services

TRANSCRIPT OF TESTIMONY  
AND PROCEEDINGS

VOLUME 4 OF 5

HEARING BEFORE: Swain E. WHITFIELD, CHAIRMAN; Comer H. 'Randy' RANDALL, VICE CHAIRMAN; and COMMISSIONERS John E. 'Butch' HOWARD, Elliott F. ELAM, Jr., Elizabeth B. 'Lib' FLEMING, Robert T. 'Bob' BOCKMAN, and G. O'Neal HAMILTON

ADVISOR TO COMMISSION: F. David Butler, Esq.  
LEGAL ADVISORY STAFF

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**LAURA P. VALTORTA, ESQUIRE**, representing FORTY LOVE POINT HOMEOWNERS' ASSOCIATION, INTERVENOR

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P R O C E E D I N G S

**CHAIRMAN WHITFIELD:** Please be seated. I'll call this hearing to order and welcome everyone, and ask Mr. Butler, our attorney, to read the docket.

**MR. BUTLER:** Yes, thank you, Mr. Chairman and other members of the Commission. This is Docket No. 2017-292-WS, the Application of Carolina Water Service, Incorporated, for approval of an increase in its rates for water and sewer services.

Please take notice that a hearing on this matter has been scheduled to begin on Tuesday, April 3rd, 2018, at 10:30 in the morning, before the Commission, in the Commission's hearing room, at 101 Executive Center Drive, Suite 100, Saluda Building, Columbia, South Carolina 29210, for the purpose of receiving testimony and evidence from all interested parties.

Mr. Chairman and other members of the Commission, the docket is in order.

**CHAIRMAN WHITFIELD:** Thank you, Mr. Butler.

At this time, I'll now take appearances from all the parties.

**MR. TERRENI:** Mr. Chairman, I'm Charlie Terreni. I represent Carolina Water Service.

1                   **MR. ELLIOTT:** I'm Scott Elliott, co-counsel on  
2                   the file.

3                   **CHAIRMAN WHITFIELD:** Thank you, Mr. Terreni,  
4                   Mr. Elliott. Welcome.

5                   **MS. VALTORTA:** My name is Laura Valtorta. I  
6                   represent the Forty Love Point Homeowners'  
7                   Association.

8                   **CHAIRMAN WHITFIELD:** Thank you, Ms. Valtorta.

9                   **MR. KNOWLTON:** I'm James Knowlton, from the  
10                  Foxwood Subdivision, and I represent our general  
11                  area as an Intervenor.

12                  **CHAIRMAN WHITFIELD:** Thank you, Mr. Knowlton.  
13                  ORS.

14                  **MR. NELSON:** Good morning, Mr. Chairman. Jeff  
15                  Nelson and Florence Belser, on behalf of the Office  
16                  of Regulatory Staff.

17                  **CHAIRMAN WHITFIELD:** Mr. Nelson, Ms. Belser,  
18                  welcome.

19                  At this time, are there any preliminary  
20                  matters to come before the Commission? Mr. Nelson.

21                  **MR. NELSON:** Thank you, Mr. Chairman.

22                  Briefly, two matters. The first one is  
23                  regarding the surrebuttal testimony that was filed  
24                  yesterday for Mr. Michael Cartin on behalf of the  
25                  company. We would ask this be excluded from the

1 record. Again, we haven't had time to prepare and  
2 file a written objection.

3 Specifically, we would point out that page  
4 two, lines 3 through 26, in Exhibit MRC-1, as well  
5 as page three, lines four and five, Mr. Cartin  
6 offers a legal opinion, stating his belief in the  
7 first portion that ORS's adjustments to income  
8 taxes is impermissible retroactive ratemaking.

9 Two points on this. First of all, Mr. Cartin  
10 is not an attorney and therefore is unqualified to  
11 offer a legal opinion. Secondly, testimony offered  
12 to establish a conclusion of law is within the  
13 exclusive province of the trier of fact – in this  
14 case, the Commission – and is not to be contained  
15 in testimony.

16 I'd cite the Commission to its own Order 95–2,  
17 the case of *O'Quinn versus Beach Associates* 249  
18 SC2d 734, and the *Dawkins versus Fields* 580 SC2d  
19 433 (2003) case.

20 That's the first matter, Mr. Chairman.  
21 Secondly, I would also point out that, by prior  
22 consent of the Commission and the parties, ORS  
23 intends to present its three witnesses in a panel  
24 format today. Those witnesses are Mr. Zach Payne,  
25 Mr. Matt Schellinger, and Dr. Douglas Carlisle.

1 All will be available for questions from the  
2 Commission, as well as the other parties, once we  
3 introduce their testimony, which I would ask to be  
4 allowed to enter both their direct and their  
5 surrebuttal testimony at the same time.

6 Thank you, Mr. Chairman.

7 **CHAIRMAN WHITFIELD:** So noted, Mr. Nelson.  
8 And your second request, your witnesses certainly  
9 will be allowed to present in a panel, as you've  
10 requested. As far as your first request, are there  
11 any comments from the other counsel representing  
12 the other parties? Yes, sir, Mr. Terreni.

13 **MR. TERRENI:** Yes, Mr. Chairman. Mr. Nelson  
14 referred to testimony that Michael Cartin gave, in  
15 which he recognized the Supreme Court's opinion in  
16 *South Carolina Electric & Gas versus Public Service*  
17 *Commission*, which was 275 SC 47. Mr. Cartin is  
18 entitled to explain what informs his opinion. In  
19 the same way any witness before this Commission  
20 that recognizes principles established in *Hope* and  
21 *Bluefield*, Mr. Cartin recognized that the Supreme  
22 Court has held very clearly that retroactive  
23 ratemaking is not allowed, the statute, by this  
24 Commission. And therefore I think Mr. Cartin's  
25 testimony should be admitted.

1                   **CHAIRMAN WHITFIELD:** Commissioner Bockman, I –

2                   **COMMISSIONER BOCKMAN:** Mr. Chairman, I –

3                   **CHAIRMAN WHITFIELD:** – see your light on.

4                   Yes, sir.

5                   **COMMISSIONER BOCKMAN:** – would just make an  
6                   observation, before the Commission rules, that the  
7                   referenced testimony to which Mr. Nelson has  
8                   referred does appear to me to be more of a legal  
9                   opinion and not evidence, as such. It certainly  
10                  relies upon an opinion of the South Carolina  
11                  Supreme Court, a case with which I am personally  
12                  quite familiar, and I don't like to be reminded of  
13                  it, to be honest.

14                  [Laughter]

15                  However, I just would like to make that  
16                  observation, knowing that the Commission will rule  
17                  on this matter at some point. But my view of it is  
18                  that it certainly appears to be a legal opinion and  
19                  not evidence to be considered by the Commission, in  
20                  terms of reaching a finding of fact in this case.  
21                  But that's just an observation, Mr. Chairman. I  
22                  appreciate you and the other people here to indulge  
23                  me with respect to that.

24                  **CHAIRMAN WHITFIELD:** Thank you, Commissioner  
25                  Bockman.

1 Are there any other – Ms. Valtorta.

2 MS. VALTORTA: Yes. No comments on this, but  
3 I have a preliminary matter to bring up.

4 CHAIRMAN WHITFIELD: If you'll hold that –

5 MS. VALTORTA: Okay.

6 CHAIRMAN WHITFIELD: – thought, just one  
7 second, Ms. Valtorta, if it's not pertaining to  
8 this.

9 Is there anything else from any of the parties  
10 pertaining to the objection Mr. Nelson has raised?

11 [No response]

12 Mr. Nelson, I'm going to sustain your  
13 objection.

14 MR. NELSON: Thank you, Mr. Chairman.

15 MR. TERRENI: Thank you, Mr. Chairman.

16 MR. NELSON: Does that go to the exclusion of  
17 the entire testimony, or are we talking about the  
18 specific lines that I pointed out?

19 MR. TERRENI: I'm sorry, I understood him to  
20 move to exclude the reference to the Supreme Court  
21 opinion on page three, not the entire testimony. I  
22 would have an issue with that.

23 CHAIRMAN WHITFIELD: Yes, sir, Mr. Nelson, can  
24 you clarify –

25 MR. NELSON: Let me qualify that a little bit,

1 Mr. Chairman. It would be page two, lines 3  
2 through 26, as well as Exhibit MRC-1, which I  
3 believe is a copy of the case itself. We also had  
4 an objection to page three, lines four and five,  
5 which, again, I also believe offered a legal  
6 opinion. So I would move to strike those specific  
7 provisions of Mr. Cartin's testimony, provided the  
8 company still chooses to introduce the remainder of  
9 his surrebuttal testimony.

10 MR. TERRENI: Mr. Chairman, I'm hearing this  
11 for the first time, so if you'd bear with me. But  
12 page three – did you say line –

13 MR. NELSON: I'm sorry, five through seven,  
14 not four and five. Five through seven.

15 MR. TERRENI: Here's the testimony being  
16 objected to, Mr. Chairman, and I think it's  
17 admissible. Do you mean – when you say lines five  
18 through seven, do you mean just the sentence  
19 beginning with "the" at the end of that line?

20 MR. NELSON: Yes.

21 MR. TERRENI: Okay. So the ORS's objecting to  
22 this sentence: "The company would need to have been  
23 over-earning during this time to trigger a refund  
24 to our customers." ORS's own exhibits show the  
25 company is not over-earning. I don't see where

1           that's a legal opinion.

2           **CHAIRMAN WHITFIELD:** Bear with us, one second,  
3           Mr. Terreni.

4                       [Brief pause]

5           **MR. TERRENI:** And if I may ask, I can offer  
6           more context by reading the whole –

7           **MR. NELSON:** Mr. Chairman, to qualify that a  
8           little bit again, I guess, I think “The company  
9           would need to have been over-earning during this  
10          time to trigger a refund to our customers,” again,  
11          that is calling – that is a legal conclusion based  
12          on the prior legal interpretation that Mr. Cartin  
13          provided to us under the Supreme Court provision,  
14          saying they would have needed to be over-earning to  
15          trigger a refund.

16          **MR. TERRENI:** Well, let's put this in context,  
17          if I may. The full answer is as follows: “The  
18          adjustment would not allow the company the  
19          opportunity to earn its allowed return. The  
20          company has proposed in testimony to set rates on  
21          test-year revenues and expenses as updated through  
22          the audit cut-off period, including all known and  
23          measurable impacts of the Tax Act. The company  
24          would need to have been over-earning during this  
25          time to trigger a refund to our customers.”



1           This is merely Mr. Cartin saying that his  
2           position is that the Commission should look at the  
3           entire financial picture of the company's health  
4           and whether the company is over-earning, rather  
5           than look at the effect of the tax rate in  
6           isolation. I don't see that being legal opinion.  
7           It's, rather, a financial opinion as to what's  
8           going to happen to this company if the Commission  
9           arbitrarily plucks out one part of the Tax and Jobs  
10          Cuts Act, and grants an adjustment based on it.

11           **CHAIRMAN WHITFIELD:** Mr. Nelson, do you have  
12          any reply to that?

13           **MR. NELSON:** I don't, Mr. Chairman. That's  
14          it.

15           **CHAIRMAN WHITFIELD:** Mr. Nelson, at this time  
16          I think I'm going to pull back that sustain of your  
17          objection, and we're going to hold that in abeyance  
18          and rule on it in the final order.

19           **MR. NELSON:** As to the entire thing, Mr.  
20          Chairman, or just as to that second portion?

21           **CHAIRMAN WHITFIELD:** As to that entire clause,  
22          there.

23           **MR. NELSON:** I will renew my objection, then,  
24          once that testimony attempts to go in the record,  
25          Mr. Chairman, because once that testimony goes into

1 the record, it's in the record. And that's why I  
2 was attempting to exclude it, at this time. Thank  
3 you.

4 **CHAIRMAN WHITFIELD:** I understand.

5 Ms. Valtorta, I'm going to resume with your  
6 preliminary matter. And I do need you to get to a  
7 microphone or get a Lavalier on, I'm told.

8 **MS. VALTORTA:** How about here [indicating]?

9 **CHAIRMAN WHITFIELD:** That's all right with me  
10 if it's all right with the company.

11 **MR. TERRENI:** Fine with us.

12 **MS. VALTORTA:** Okay. I'm Laura Valtorta, from  
13 Forty Love Point. We submitted pre-filed testimony  
14 for two witnesses: Ms. Barbara King, who is here  
15 with me today, and Mr. Dave Dixon. Mr. Dixon is  
16 not able to attend because this is spring break and  
17 he's away with his family. He has had ample time  
18 to speak with Carolina Water Service about his  
19 problems at his house. So, I am moving that his  
20 testimony be admitted without his presence here  
21 today and without chance for cross-examination.

22 **MR. TERRENI:** We have no objection.

23 **CHAIRMAN WHITFIELD:** Well, that was my next  
24 move. I was going to check with the parties.

25 **MR. TERRENI:** I'm sorry, I thought you –

1                   **CHAIRMAN WHITFIELD:** The company says they  
2                   have no objection.

3                   ORS?

4                   **MR. NELSON:** No objection, Mr. Chairman.

5                   **MS. VALTORTA:** Thank you. So, I would just  
6                   move that the testimony be admitted without Mr.  
7                   Dixon's presence, and –

8                   [Discussion off the record]

9                   **CHAIRMAN WHITFIELD:** Ms. Valtorta, we're going  
10                  to need a written verification, but I will do that.  
11                  We will allow him to do it, but we are going to  
12                  need a written verification.

13                  **MS. VALTORTA:** From Mr. Dixon? Sure.

14                  **CHAIRMAN WHITFIELD:** Yes.

15                  **MS. VALTORTA:** Okay, thank you.

16                  **CHAIRMAN WHITFIELD:** Are there any other  
17                  preliminary matters at this time from either of the  
18                  parties?

19                  [No response]

20                  Well, if there are no other preliminary  
21                  matters at this time, I understand we do have a few  
22                  public witnesses here this morning, and I'm going  
23                  to call on Mr. Butler to read your name. I think a  
24                  lot of you heard the ground rules at the night  
25                  hearings.

1           Mr. Butler, if you could kind of briefly  
2           summarize some of that, we will take public  
3           witnesses at this time.

4           **MR. BUTLER:** Yes, sir, Mr. Chairman, I'd be  
5           glad to do that. In a moment, I am going to call  
6           the names of the public witnesses that we have that  
7           want to be heard this morning. When I call your  
8           name, do please come forward and wait to be sworn  
9           in. And then, after you testify, if you will,  
10          please keep your seat until dismissed by the  
11          Chairman, as the Commissioners may have some  
12          questions for you.

13          And I was going to say, please feel free to  
14          adjust the microphone. Speak directly into the  
15          microphone, if you will, so that we can be sure and  
16          get everything you say into the record and that we  
17          can hear you.

18          We also would ask, as far as the public  
19          witnesses go, to please, if possible, limit your  
20          comments to three minutes, and we would appreciate  
21          that greatly.

22          So having said that, I will first call Mr. Ron  
23          Gremore, or Gremore? G-r-e-m-o-r-e?

24                       [Witness affirmed]

25          <

1 THEREUPON came,

2 R O N G R E M O R E ,

3 who, having been first duly affirmed, testified as follows:

4 WITNESS: Shall I begin?

5 CHAIRMAN WHITFIELD: Yes, sir.

6 MR. BUTLER: Yes, sir, you can begin.

7 CHAIRMAN WHITFIELD: Just state your name and  
8 address, yes, sir.

9 WITNESS: Thank you. My name is Ron Gremore,  
10 and I live at 112 Moontide Court, Lexington, 29072.

11 First of all, I want to thank you for this  
12 opportunity to address the Commission regarding  
13 Carolina Water Service's Application for adjustment  
14 of rates and charges. Their request significantly  
15 impacts me and my neighbors.

16 I am here representing The Landings  
17 Homeowners' Association, which is located at 255  
18 Country Lake Drive, Lexington. The elected and  
19 representative board of our association has  
20 reviewed the request of the water company and have  
21 unanimously voted to vigorously oppose any  
22 additional increases proposed by Carolinas Water  
23 Services.

24 As a repre- -- well, let just take a step back,  
25 because I'm not going to provide you with a lot of

1 statistics, because you have a lot of it already  
2 and many people will be providing that to you, if  
3 they haven't already done so. I will just add that  
4 I am a new resident to South Carolina, a new  
5 resident to Lexington County. I moved here five  
6 years ago from Indianapolis. I love it here. I  
7 have no intention of moving. Even if I wanted to,  
8 my wife wouldn't let me. She really loves it here,  
9 as well. But, as we become residents of Lexington  
10 County and residents of The Landings Homeowners'  
11 Association, all I've heard from neighbors – well,  
12 I shouldn't say all I've heard. One of the many  
13 things I've heard from neighbors and fellow members  
14 of our association is a complaint about the rates  
15 of our water company. Many of my neighbors have  
16 asked how can we change and seek out different  
17 water services, because many of my neighbors have  
18 lived here much longer than me, and they've  
19 experienced repeated rate increases and have told  
20 me that the services haven't gotten any better. In  
21 fact, people with more history than I do complain  
22 that the services have gotten worse. My time  
23 period is limited to only five years here, and I  
24 also experience what I think are significant rates  
25 that are unjustified.

1 My neighbors just moved here from Orlando,  
2 Florida. I have other neighbors who have moved  
3 here from all areas of the North, Northeast,  
4 Midwest. I'm one of those people who came here to  
5 avoid the snow. But the water rates we've  
6 experienced in other parts of the country no way  
7 compare to what we're paying here, and it's just  
8 unbelievable to me what we've experienced and may  
9 continue to experience.

10 I'm retired, so I have the opportunity to come  
11 before you and I appreciate your public service to  
12 the citizens of South Carolina. You have my  
13 respect and admiration. I'm retired after 37 years  
14 in HR management for state, local, county, and a  
15 brief period in federal government, in HR  
16 management. I've worked with a lot of people and  
17 have worked with a lot of agencies, and so I  
18 appreciate your sacrifices and the work you do. So  
19 I believe that you will seriously look at what's  
20 before you and look at it very closely and make the  
21 best judgment possible to protect the citizens of  
22 Lexington County. Thank you.

23 **CHAIRMAN WHITFIELD:** Hold on just one second,  
24 Mr. Gremore. I need to see if there are any  
25 questions from any of the parties.

1 Mr. Terreni, questions –

2 MR. TERRENI: None, Your Honor.

3 CHAIRMAN WHITFIELD: – for this witness?

4 Ms. Valtorta?

5 MS. VALTORTA: No questions.

6 CHAIRMAN WHITFIELD: Mr. Knowlton, any  
7 questions?

8 MR. KNOWLTON: No questions.

9 CHAIRMAN WHITFIELD: ORS?

10 MR. NELSON: No questions, Mr. Chairman.  
11 Thank you.

12 CHAIRMAN WHITFIELD: Commissioners, any  
13 questions? Commissioner Fleming.

14 COMMISSIONER FLEMING: Yes.

15 EXAMINATION

16 BY COMMISSIONER FLEMING:

17 Q I believe you said that service had become worse, rather  
18 than better, even though the rates had increased? Could  
19 you specify what has gotten worse?

20 A Thank you for that question. And, specifically, I'll  
21 speak just for myself, and that is, our water pressure  
22 seems to fade and then come back, fade and come back.  
23 I'm not sure of the cause. When I've contacted the  
24 water company, they have not given me believable or  
25 acceptable answers to why our water pressure keeps, you



1 know, ebb-and-flowing. That's one of the primary  
2 concerns. I do feel fortunate and blessed that we  
3 haven't had to boil, in my neighborhood, water, where I  
4 see that in other regions of Metro Columbia. But the  
5 big issue for me has been the failing of water pressure,  
6 which I cannot explain.

7 **Q** And you've made contact and haven't gotten a suitable  
8 answer to that question?

9 **A** No. Now, in fairness – in fairness – one response I did  
10 get was, "Well, it's all this new development coming in  
11 here, and, you know, what we have to provide." And if I  
12 may add – I'm sorry – if I may add, I continue to be  
13 educated as to how our water is actually coming to us  
14 from our current water company, because I know other  
15 people in the region have different options and I  
16 understand that Carolina Water Company is purchasing the  
17 water and then piping it to us, and other utilities are  
18 doing all the work. I may be wrong about that. That's  
19 just what I have been advised by parties that have been  
20 around a lot longer than me, in terms of a resident of  
21 this region.

22 **Q** And when you say you haven't had any boil-water  
23 advisories but other subdivisions have, are you talking  
24 about subdivisions served under Carolina Water Service?  
25 Or just in general?

1     **A**     I appreciate that question, and I do not know. Sorry.

2                     **COMMISSIONER FLEMING:** Okay, thank you.

3                     **CHAIRMAN WHITFIELD:** Any other questions for  
4     Mr. Gremore? Commissioner Elam.

5                     Hold on one second, Mr. Gremore. One second.  
6     We've got another question.

7                     **WITNESS:** Oh, my apology.

8                     **CHAIRMAN WHITFIELD:** Commissioner Elam.

9                                     **EXAMINATION**

10    **BY COMMISSIONER ELAM:**

11    **Q**     I'm sorry, Mr. Gremore, can you tell me again what  
12     subdivision?

13    **A**     The Landings.

14    **Q**     The Landings?

15    **A**     Yes.

16    **Q**     Okay.

17    **A**     Which is just off of Beechcreek Road.

18                     **COMMISSIONER ELAM:** Okay, thank you.

19                     **CHAIRMAN WHITFIELD:** Thank you, Commissioner  
20     Elam.

21                     And thank you, Mr. Gremore, and thank you for  
22     your testimony.

23                                     [WHEREUPON, the witness was excused.]

24                     Mr. Butler, next witness.

25                     **MR. BUTLER:** Yes, sir, Mr. Chairman. I'd like

1 to call Mr. Reed Bull to the stand, please. Mr.  
2 Bull?

3 [Witness affirmed]

4 THEREUPON came,

5 **R E E D B U L L ,**

6 who, having been first duly affirmed, testified as follows:

7 **WITNESS:** My name is Reed Bull. I live at 232  
8 Forecastle Court, in Lexington. I live in The  
9 Landings Subdivision, which is serviced by Carolina  
10 Water Service for both water and sewer.

11 I'm a retired engineer; I've been retired for  
12 about seven years. I've been a resident of The  
13 Landings Subdivision for 30 years, as of last  
14 month, so I've had a lot of experience with water  
15 bills and water rates.

16 All right. To talk a little bit about – and  
17 Ron also lives in the same subdivision, and he  
18 talked a little bit about our facilities. We get  
19 water – originally when I first moved in, we had a  
20 well system and received water from a well. Some  
21 years ago, Carolina Water Service contracted with  
22 Lexington County and they began to receive water  
23 from Lexington County. In that case, the water's  
24 treated by the West Columbia, Lexington County,  
25 treatment facility on Lake Murray and transported

1           about three miles, three to three and a half miles,  
2           and then it is tied into the water system for The  
3           Landings Subdivision. And where I live, probably  
4           Carolina Water Service has facilities that  
5           transport that water maybe 400 yards, probably, to  
6           my house and provide. And what I've noticed – and  
7           I've kept up with rates over the years; I'm going  
8           to talk about those, here, in a little bit. But  
9           Lexington County transports the water – treats it,  
10          transports water three and a half miles. Carolina  
11          Water Service transports it, maybe the worst case  
12          is less than a quarter of a mile in the  
13          subdivision, and sends us a bill, and reads the  
14          meters. All right. It's been my experience over  
15          the years that the charges for my water by Carolina  
16          Water Service are greater than those for Lexington  
17          County.

18                 The way the bills are now, that's a lump-sum  
19                 fee and I don't know exactly what the breakdown is,  
20                 but based on a previous rate situation we had a  
21                 separation between what Lexington County got and  
22                 what Carolina Water Service got.

23                 Our sewer system: We're in The Landings.  
24                 We're on Lake Murray. And being an engineer, I'm  
25                 very familiar with it. They developed a LETTS

1 system which allowed contractors to put in a  
2 cheaper sewer system, and supposedly it was for  
3 economic or environmental concerns of Lake Murray,  
4 and all. So, I have a LETTS tank. I grew up in  
5 the Lowcountry of South Carolina and grew up with a  
6 septic tank. When I found out I had to have a  
7 septic tank, which was after I bought my lot and  
8 began building my house, you know, I wasn't very  
9 pleased. But over the years, that LETTS tank has  
10 to be pumped out. A lot of other people – in fact,  
11 the majority of people on Carolina Water Service –  
12 don't have a LETTS tank. Their entire sewage flow,  
13 solids and water, are treated at the sewer plant.  
14 I only have the effluent, which is the water  
15 portion of the sewage, that goes to the treatment  
16 plant run by Carolina Water Service. Probably over  
17 the last 30 years, I've spent over \$1000 having  
18 that tank pumped out, and had to dig out where  
19 before they'd come pump it out so it gets pumped  
20 out correctly. And we pay the same rates, and all  
21 rates are high.

22 So that's the kind of system that we have and  
23 that we're responsible for paying. I had my old  
24 bills and I pulled out some and I did some  
25 computations. From beginning of 2012 to the

1           presently proposed rates, I did it for –

2                           [3-minute bell]

3           I did it for – I'm about through, so I'll  
4           continue a little bit.

5                   **CHAIRMAN WHITFIELD:** Mr. Bull, you go ahead.  
6           You go – you go ahead, you go right ahead with your  
7           testimony

8                   **WITNESS:** Okay. Thank you. Well, I did it  
9           for 3000 gallons per month and I did it for 4000  
10          gallons per month. And from the beginning of 2012  
11          – and that's the furthest I had bills back – to the  
12          proposed rate, based on a 3000-gallons-per-month  
13          use, our rates have gone up 60 percent since 2012.  
14          The rate for 4000 gallons per month has gone up  
15          56.3 percent.

16                  Now, what that breaks down, I also computed as  
17          to how much has the water portion gone up, and I  
18          did that only for 3000 gallons because the  
19          percentage doesn't change much. The water in those  
20          – since 2012 – has gone up 36 percent. The sewer  
21          has gone up 79 percent.

22                  So, I'm retired. You know, my Social Security  
23          has not gone up anywhere close to that. So, I know  
24          it costs a lot to treat sewage nowadays and a lot  
25          of problems with all the Saluda River – in fact,

1 the effluent from our sewage plant I think goes to  
2 the Saluda River, which is not a good situation.  
3 So I just ask y'all to consider – this is not the  
4 first time I've been before the Commission, and  
5 always – but we pay some of the highest rates in  
6 South Carolina and have for 30 years. And I just  
7 ask that you please look at this and try to be as  
8 fair to us as you can be. Thank you.

9 **CHAIRMAN WHITFIELD:** Thank you, Mr. Bull. If  
10 that concludes your testimony, I'm going to see if  
11 there are any questions, if you'll just bear with  
12 me.

13 Mr. Terreni, any questions from the company?

14 **MR. TERRENI:** None, Mr. Chairman.

15 **CHAIRMAN WHITFIELD:** Ms. Valtorta.

16 **MS. VALTORTA:** No questions.

17 **CHAIRMAN WHITFIELD:** Mr. Knowlton?

18 **MR. KNOWLTON:** No, sir. Thank you.

19 **CHAIRMAN WHITFIELD:** Office of Regulatory  
20 Staff?

21 **MR. NELSON:** No questions.

22 **CHAIRMAN WHITFIELD:** Commissioners, any  
23 questions for Mr. Bull, for this witness?

24 [No response]

25 Well, if not, Mr. Bull, thank you for your

1 testimony and thank you for your participation, and  
2 you may step down.

3 [WHEREUPON, the witness was excused.]

4 **CHAIRMAN WHITFIELD:** Mr. Chairman, that does  
5 complete the list of public witnesses that I have  
6 at this time.

7 **CHAIRMAN WHITFIELD:** Okay. Well, thank you,  
8 Mr. Butler.

9 And if that completes our public witnesses, at  
10 this time, Mr. Terreni, I'll turn it over to you and  
11 Mr. Elliott for the company to present its case.

12 **MR. TERRENI:** Thank you, Mr. Chairman.

13 **MR. ELLIOTT:** We're going to call three  
14 witnesses as the panel. We're going to call them  
15 in the order of Hunter, Cartin, and Gilroy. And  
16 I'd ask those gentlemen to come forward, please.

17 And, Mr. Chairman, for the record, I'm going  
18 to examine Mr. Hunter and Mr. Gilroy, and Mr.  
19 Terreni will examine Mr. Cartin.

20 **CHAIRMAN WHITFIELD:** Thank you, Mr. Elliott.

21 [Witnesses affirmed]

22 THEREUPON came,

23 **R O B E R T M . H U N T E R ,**

24 **M I C H A E L R . C A R T I N ,**

25 **B O B G I L R O Y ,**



1 called as witnesses on behalf of the Applicant, Carolina  
2 Water Service, who, having been first duly affirmed, were  
3 examined and testified as follows:

4 **DIRECT EXAMINATION**

5 **BY MR. ELLIOTT:**

6 **Q** Mr. Hunter, please state your name, and spell it for the  
7 record.

8 **A** [HUNTER] My name is Robert Hunter. R-o-b-e- -

9 **CHAIRMAN WHITFIELD:** Mr. Elliott, I need him  
10 to get his microphone on.

11 **WITNESS HUNTER:** Hello?

12 **MR. ELLIOTT:** It's a mystery to me, too, but I  
13 think there's a button right there [indicating].

14 **WITNESS HUNTER:** All right. Is that better?

15 My name is Robert Hunter. R-o-b-e-r-t H-u-n-  
16 t-e-r.

17 **BY MR. ELLIOTT:**

18 **Q** All right, Mr. Hunter. By whom are you employed and in  
19 what capacity?

20 **A** [HUNTER] I'm employed by Carolina Water Service. I am  
21 the Financial Planning and Analysis manager.

22 **Q** Very fine. Now, have you testified before?

23 **A** [HUNTER] I have not.

24 **Q** And so, since we met yesterday, have you been practicing  
25 your y'all's, as I suggested?

1     **A**     [HUNTER] Yes.

2     **Q**     Good. Well, if y'all are ready, would you please tell  
3           me, sir, did you cause to be prepared 10 pages of direct  
4           testimony for prefiling with this Commissioning?

5     **A**     [HUNTER] Yes, I have.

6     **Q**     Have you had a chance to read your direct testimony,  
7           prior to your testimony here this morning?

8     **A**     [HUNTER] Yes, I have.

9     **Q**     Do you have any changes or corrections to your prefiled  
10          testimony?

11    **A**     [HUNTER] I do not.

12    **Q**     If I asked you those same questions on direct, this  
13          morning, would your answers be the same?

14    **A**     [HUNTER] Yes, they would.

15                 **MR. ELLIOTT:** All right. Mr. Chair, I'd like  
16                 to go ahead and move the prefiled direct testimony  
17                 of Mr. Hunter in, as if given orally from the  
18                 stand.

19                 **CHAIRMAN WHITFIELD:** Mr. Hunter's prefiled  
20                 direct testimony will be entered into the record as  
21                 if given orally from the stand.

22                 **MR. ELLIOTT:** And just for the sake of  
23                 smoothness, I'd like to go ahead and introduce his  
24                 rebuttal testimony at this time, too, if I may.

25                 **CHAIRMAN WHITFIELD:** Certainly.

1 **BY MR. ELLIOTT:**

2 **Q** All right. Mr. Hunter, did you cause to be prepared and  
3 prefiled with this Commission six pages of rebuttal  
4 testimony?

5 **A** [HUNTER] Yes, I have.

6 **Q** Have you had a chance to review that testimony?

7 **A** [HUNTER] Yes, I have.

8 **Q** Do you have any changes or corrections to that  
9 testimony?

10 **A** [HUNTER] I do not.

11 **Q** If I asked you those same questions today, would your  
12 answers be the same?

13 **A** [HUNTER] Yes.

14 **Q** And in connection with your rebuttal testimony, have you  
15 prefiled two exhibits, Exhibit A and B?

16 **A** [HUNTER] Yes.

17 **Q** Have you reviewed your exhibits?

18 **A** [HUNTER] Yes, I have.

19 **Q** Any changes or corrections to your exhibits?

20 **A** [HUNTER] No, sir.

21 **MR. ELLIOTT:** Mr. Chair, I would move the  
22 rebuttal testimony of Mr. Hunter, together with his  
23 two exhibits, into the record at this time.

24 **CHAIRMAN WHITFIELD:** Mr. Hunter's rebuttal  
25 testimony will be entered into the record and his

1 Exhibits A and B with his rebuttal testimony will  
2 be entered in as Hearing Exhibit No. 7.

3 [WHEREUPON, Hearing Exhibit No. 7 was  
4 marked and received in evidence.]

5 MR. ELLIOTT: Thank you.

6 BY MR. ELLIOTT:

7 Q Now, Mr. Hunter, with respect to your direct testimony,  
8 I would like you to tell the Commission a little bit  
9 about yourself. Let's start with your duties in your  
10 current position.

11 A [HUNTER] So, currently, I'm responsible for the daily  
12 management of all state-level accounting and finance  
13 operations. This includes also managing the annual  
14 financial budgeting process, as well as managing the  
15 reporting of the monthly capital spending and  
16 forecasting.

17 Q All right. Very fine. And you analyze the budget, for  
18 instance? You work with the budget for the company?

19 A [HUNTER] Yes.

20 Q Just briefly, tell the Commission your educational  
21 background.

22 A [HUNTER] I graduated from the University of Illinois in  
23 Champaign-Urbana. I hold bachelor's degrees in Finance  
24 and General Management.

25 Q Thank you. Now, would you please explain for the

Commission why Carolina Water is requesting rate relief at this time?

A [HUNTER] So, we have had increases in both operating expenses and as well as additional plant investments since December of 2014, which is the end of the test year in the prior rate case. Therefore, we are not able to earn our allowed rate of return and are asking for rate relief, at this time.

Q Good. Now, with respect to the Application, would you explain, please, how the test-year expenses were adjusted?

A [HUNTER] Yes. So, we made pro forma adjustments to the test-year expenses, based on known and measureable changes to actual expenses. For example, revenues are annualized to reflect year-end customers at current rates, and we also made adjustment to reflect the removal of the I-20 wastewater system. This was done due to anticipation of losing that system because of the condemnation by the Town of Lexington. The Town took possession on February 1, 2018.

Another adjustment was salaries, wages, and benefits, which are adjusted from test-year to current levels.

We also adjusted regulatory commission expense. This has been adjusted for the total estimated cost of

1 this case, which includes attorneys' fees and expert  
2 witness fees.

3 We adjusted depreciation and amortization; they're  
4 annualized at 1½ percent.

5 Taxes other than income are adjusted to annualize  
6 gross receipts, utility, or commission taxes, as well as  
7 franchise taxes at present and proposed revenues.  
8 Additionally, taxes other than income also include  
9 payroll taxes, which have been adjusted to current  
10 salary levels. And property taxes, as well, are part of  
11 taxes other than income, and these have been adjusted to  
12 reflect the most updated known and measurable amounts  
13 from test-year to current levels.

14 Income taxes are calculated on the taxable income  
15 and this is at the rates in effect at the time of the  
16 Application.

17 We've also removed non-recoverable items.

18 Finally, we also adjusted purchased water and  
19 wastewater expenses. These have been adjusted to  
20 reflect current levels known at the time the Application  
21 was filed, and this is due to increased expenses from  
22 rate increases from providers that we have. This has  
23 been put into deferred – deferred into a deferral asset  
24 account since the prior rate case.

25 **Q** Now, with respect to rate base, what are the pro forma

1 adjustments that you have made to the rate base in this  
2 Application?

3 **A** [HUNTER] So, we adjusted per books of accumulated  
4 depreciation and accumulated amortization. They've been  
5 adjusted for depreciable assets at 1½ percent.

6 A pro forma adjustment has been made to include pro  
7 forma actual plant and general ledger additions.

8 Excess book value has been included for ratemaking  
9 purposes.

10 And, additionally, we have made adjustments to  
11 reflect the removal of the I-20 wastewater system to the  
12 gross plant in service, accumulated depreciation, CIAC,  
13 cash working capital, and plant acquisition adjustment.

14 **Q** Now summarize for us, briefly, the proposed changes in  
15 the water service rates.

16 **A** [HUNTER] Okay. So, in Exhibit A of the Application, our  
17 – contains the proposed water charges. The proposed  
18 rate structure for Territory 1 and Territory 2 will  
19 remain the same as approved in the prior rate case.  
20 That means that there'll be separate charges for one  
21 water supply customer where water is supplied by the  
22 wells owned and operated by Carolina Water and to water  
23 distribution customers where water is purchased from a  
24 governmental body or agency or other entity for  
25 distribution and resale by Carolina Water.

1 **Q** Now please talk a little about the deferred account.

2 Carolina Water eliminated the pass-through billing of  
3 commodity charges for its water distribution customers  
4 in the last rate case. Please describe how CWS recovers  
5 its bulk commodity costs.

6 **A** [HUNTER] So since the prior case, we've experienced rate  
7 increases from providers. Because the pass-through was  
8 removed in the last rate case, we have been deferring  
9 these increases into a deferral asset that was approved  
10 during the prior rate case.

11 In this last case, Carolina Water made adjustment  
12 to the test year – or, sorry. In this rate case,  
13 Carolina Water made an adjustment to the test-year  
14 expenses to reflect current known and measurable expense  
15 levels. This includes the impact of rate changes from  
16 the providers. We'll also be seeking recovery of the  
17 deferral asset account through amortization of this  
18 asset.

19 **Q** What is the balance of the deferred account, and explain  
20 how we intend to recover that balance.

21 **A** [HUNTER] So, as of January 31, 2018, the balance was  
22 \$616,422. We intend to recover the costs in this  
23 account by amortizing that balance over a three-year  
24 period beginning on the date the rates are approved  
25 under this Application to go into effect.



1 Q Very fine. Summarize, now, please, the proposed changes  
2 in the sewer charges.

3 A [HUNTER] Again, Exhibit A of the Application contains  
4 the proposed wastewater charges. Carolina Water  
5 proposes to combine, one, the sewer-collection-and-  
6 treatment-only customers with the sewer-collection-only  
7 customers into one single rate per unit. There will  
8 remain separate rates on the tariff for mobile homes and  
9 The Village sewer-collection customer classes.

10 Q Now this is where it gets a little dicey, I think.  
11 Please describe the impact of the Tax Cut and Jobs Act  
12 of 2017 on the rate request.

13 A [HUNTER] I will do my best. The Application was filed  
14 prior to the enactment of the Act. So, therefore, the  
15 impact of the Act was not included at the time of the  
16 filing of the Application. Amongst other things, the  
17 Act reduced the corporate tax rate from 35 percent to 21  
18 percent, so by 14 percent. This reduces income taxes.  
19 Carolina Water estimates the reduction in revenue  
20 requirement, using the initial Application, as a result  
21 of the statutory rate change to be approximately  
22 \$877,000. The problem with using that information in  
23 isolation is that it does not take into account  
24 increased tax cost that Carolina Water may incur as a  
25 result of changes under the Tax Act, such as taxes on

1 CIAC.

2 **Q** Now let's go a little farther. I mean, I think the low-  
3 hanging fruit is the change in the tax rate. Does the  
4 Tax Cut and Jobs Act affect rates in any other way?

5 **A** [HUNTER] Yes.

6 **Q** Please describe those.

7 **A** [HUNTER] So, the Act would also reduce the cost of  
8 service as it relates to customers due to the  
9 amortization of excess accumulated deferred income  
10 taxes, or ADIT. ADIT is the difference between the  
11 amount of tax recovered in rates and the amount of tax  
12 actually paid by a utility. So when the tax rate is  
13 lowered, a portion of ADIT will never be paid to the  
14 federal government and excess deferred taxes are  
15 created. Excess deferred taxes mean that the utility  
16 charged the consumers at a higher tax rate in the early  
17 years than the actual tax paid by the utility in the  
18 future. Because the excess ADIT will not be paid to the  
19 federal government, it should be held in a regulatory  
20 liability account until it's determined whether a refund  
21 to ratepayers is appropriate.

22 **Q** Now explain for us how ADIT is computed.

23 **A** [HUNTER] So, we use a process called normalization. The  
24 normalization provisions contained in the Internal  
25 Revenue Code apply to accelerated depreciation, certain

1 excess ADIT due to reduction in income tax rate, and to  
2 the investment tax credit.

3 **Q** All right. Now describe the impact of accelerated  
4 depreciation on the ADIT computation.

5 **A** [HUNTER] So, accelerated depreciation provisions in the  
6 Internal Revenue Code provide incentives to taxpayers  
7 for investment, construction, or other economy-  
8 stimulating activities. Because of accelerated  
9 depreciation, the amount of tax paid by the utility's  
10 generally less than the taxes covered – recovered from  
11 ratepayers, especially in the early years of an asset's  
12 life. So, in other words, because customers are paying  
13 revenues based on normal depreciation life, accelerated  
14 depreciation of an asset creates a difference between  
15 book income and ratemaking income. So if an asset's  
16 depreciation is accelerated at the beginning of its  
17 life, our book income will be lowered since the  
18 depreciation expense is higher, and, therefore, the  
19 income taxes paid are lower.

20 Assuming the statutory rate would remain the same  
21 over the life of that asset, later in the asset's life,  
22 this would reverse. So, since the asset would become  
23 depreciated, due to a lower depreciation expense, our  
24 book income now would be higher, and, therefore, the  
25 income taxes paid are now higher. So this normalization

1 process is really meant to equalize tax liability over  
2 the course of an asset's life.

3 **Q** Thank you. Does the ratepayer benefit from the impact  
4 of the tax cut on ADIT?

5 **A** [HUNTER] Yes, it does. So, once we determine the  
6 appropriate amount of ADIT due to the Act, the ADIT  
7 balance will be adjusted and a regulatory liability will  
8 be created in that amount. This regulatory liability  
9 will be amortized over the life of the asset. And  
10 because of this, the customers will receive a benefit  
11 through the reduction of revenue requirement in the form  
12 of that.

13 **Q** All right. What other impact on ratemaking has the Tax  
14 Cut and Jobs Act had?

15 **A** [HUNTER] The law has also changed the impact of property  
16 or cash contributed by developers in aid of  
17 construction, or CIAC. Prior to the Act, CIAC was not  
18 taxable. However, property or cash contributed by the  
19 developers now is taxable. Ratepayers will benefit if  
20 the developer's required to pay the tax on that  
21 contribution, so any CIAC, including tap fees, dedicated  
22 by the developer will now need to be grossed up by  
23 Carolina Water for federal and state taxes.

24 **Q** Very fine. What ratemaking methodology does the company  
25 propose the Commission employ in this rate case?

1     **A**     [HUNTER] Carolina Water proposes that we continue to  
2           have our rates determined on utilizing the rate of  
3           return on rate base methodology.

4                     **MR. ELLIOTT:** Thank you.  
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23     [PURSUANT TO PREVIOUS INSTRUCTION, THE  
24     PREFILED DIRECT TESTIMONY OF ROBERT M.  
25     HUNTER FOLLOWS AT PGS 260-269]

**THE PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA**

**DOCKET NO. 2017-292-WS**

In the Matter of

Application of Carolina Water Service,  
Inc. for an Adjustment of Rates and  
Charges and Modifications to Certain  
Terms and Conditions for the Provision of  
Water and Sewer Service

)  
)  
)  
)  
)  
)  
)

**DIRECT TESTIMONY**

**OF**

**ROBERT M. HUNTER**

**Q. PLEASE STATE YOUR NAME, PRESENT POSITION, AND BUSINESS**

**ADDRESS.**

**A.** My name is Robert M. Hunter. I am the Financial Planning and Analysis Manager for Carolina Water Service, Inc. ("CWS" or "Company"). My business address is 150 Foster Brother Drive, West Columbia, SC 29172.

**Q. WHAT ARE YOUR DUTIES IN YOUR CURRENT POSITION?**

**A.** As Financial Planning and Analysis Manager, I am responsible for the daily management of all state level accounting and finance operations. I perform financial and business-related analyses and research in areas such as expense trends, rate of return, depreciation, working capital and investments at the state level. My duties and responsibilities include:

- Managing the annual financial budgeting process for the Company,
- Analyzing budget and forecast variances and year-over-year variances to provide explanations to management, and to assist with financial decision-making,
- Managing and reporting monthly capital spending and forecasting,
- Handling the regulatory process for matters requiring governmental approval, including filing necessary applications,
- Utilizing internal databases and other tools to support qualitative and quantitative analyses and metrics for the Company, and



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- [c] Salaries, wages and benefits are adjusted from test year to current levels. In addition, capitalized time has been adjusted to reflect current capitalized time rates for current employees.
- [d] Regulatory commission expense including attorneys' fees, expert witness fees, and out-of-pocket expenses has been adjusted for the total estimated cost of this case and the unamortized portion of prior rate case amounts.
- [e] Depreciation and amortization are annualized at 1.5% on depreciable/amortizable assets/Contributions in Aid of Construction ("CIAC"). Separate from these assets, depreciation has been calculated and included for computers, vehicles, and other allocated plant.
- [f] Taxes other than income are adjusted to annualize gross receipts, utility or commission taxes, and franchise taxes at present and proposed revenues. Taxes other than income also includes payroll taxes adjusted for annualized salaries. Property Taxes have been adjusted to reflect most updated known and measurable amounts from test year to current levels.
- [g] Income taxes are computed on taxable income at the rates in effect at the time of filing.
- [h] Allowance for Funds Used During Construction ("AFUDC") is eliminated for rate making purposes.
- [i] Interest on debt has been computed using a 51.89%/48.11% equity/debt ratio and a 6.60% cost of debt.
- [j] Non-recoverable items have been removed.
- [k] Revenues are increased to reflect Carolina Water Service's requested incremental revenue adjustment.
- [l] Uncollectibles are adjusted at test year percentages for the requested incremental revenue adjustment.
- [m] Transportation expense has been adjusted to reflect the expense as allocated by driver.
- [n] Sale of Utility Property has been removed for ratemaking purposes.
- [o] Deferred Maintenance expense has been adjusted to include the annual amortization expense anticipated due to the creation of the Deferral Asset account approved in the prior rate case for increases in purchased water rates since the prior rate proceeding.
- [p] Purchased water and waste-water expenses have been adjusted to reflect current expense levels known at the time the Application was filed. Increased expenses due to rate increases from providers has been deferred into the Deferral Asset account since the prior rate case. These adjustments are made to full invoiced amounts.

[q] The Income Statement has been adjusted to reflect all changes related to the removal of the I-20 Waste-Water System.

**Q. WHAT ARE THE PRO FORMA ADJUSTMENTS MADE TO THE RATE BASE STATEMENT (SCHEDULE C)?**

**A.** The following adjustments have been made to rate base:

[a] Gross plant in service is adjusted to reflect adjusted vehicles, allocated by the various accurate allocation percentages for Carolina Water Service.

[b] Per books Accumulated Depreciation and Accumulated Amortization has been adjusted for depreciable assets at 1.5%. Separate from these assets, Accumulated Depreciation has been calculated and included for computers, vehicles and other allocated plant.

[c] Cash working capital is calculated based on 1/8 of maintenance and general expenses.

[d] A pro forma adjustment has been made to include actual/estimated pro forma plant and general ledger additions.

[f] Excess book value has been included for ratemaking purposes.

[g] Adjustments have been made to Gross Plant in Service, Accumulated Depreciation, CIAC, Cash Working Capital and Plant Acquisition Adjustment to reflect the removal of the I-20 Waste-Water System from CWS.

**Q. PLEASE SUMMARIZE THE PROPOSED CHANGES IN THE COMPANY'S WATER SERVICE RATE SCHEDULES.**

**A.** Exhibit "A" to the Application contains the Company's Schedule of Proposed Water Charges. The proposed water rate structure for Territory 1 and Territory 2 will remain the same as approved in the prior rate case. In Territory 1 and Territory 2 there will remain separate charges for Water Supply Customers (where water is supplied by wells owned and operated by CWS) and Water Distribution Customers (where water is purchased from a governmental body or agency or other entity for distribution and resale by CWS).



**Q. CWS ELIMINATED THE “PASS-THROUGH” BILLING OF COMMODITY CHARGES FOR ITS WATER DISTRIBUTION CUSTOMERS IN ITS LAST RATE CASE. PLEASE DESCRIBE HOW CWS RECOVERS ITS BULK COMMODITY COSTS.**

**A.** Since the prior case, CWS has experienced increases in water rates from some of its purchased water providers. Because the “pass-through” billing of commodity charges was removed in the last rate case, CWS has been deferring increased expenses realized due to these rate changes into a Deferral Asset account approved in the last case. In this rate case, CWS has made an adjustment to the test year purchased water expense amount to reflect the current known and measurable expense levels including the impact of rate changes from providers. In addition, CWS will seek recovery of the Deferral Asset account through amortization of the asset.

**Q. WHAT IS THE BALANCE IN THE DEFERRED ACCOUNT AND EXPLAIN HOW CWS INTENDS TO RECOVER THIS BALANCE?**

**A.** As of January 31, 2018, the balance, in the Deferred Asset account is \$616,422. CWS intends to recover the costs in the Deferred Asset account by amortizing the balance over three (3) years beginning on the date approved rates under this application become effective.

**Q. PLEASE SUMMARIZE THE PROPOSED CHANGES IN THE COMPANY’S SEWER RATE SCHEDULES.**

**A.** Exhibit “A” to the Application contains the Company’s Schedule of Proposed Sewer Charges. Under the existing tariff, the flat rate charge for Sewer Collection & Treatment Only Customers and the flat rate charge for Sewer Collection Only Customers are two different rates. CWS proposes to combine Sewer Collection & Treatment Only Customers and Sewer Collection Only Customers into one single rate per unit. Separate rates will remain on the tariff for Mobile Homes, Wholesale Services (Midlands Utility) and The Village Sewer Collection Customers.

1 **Q. WHAT IMPACT DOES THE TAX CUT AND JOBS ACT HAVE ON THE**  
2 **COMPANY'S RATE REQUEST IN THIS CASE?**

3 **A.** CWS filed the Application prior to enactment of the Tax Cut and Jobs Act ("the Act"),  
4 therefore, the impact of the Act was not included in the filing. Among other things, the Act reduced  
5 the corporate income tax rate by 14% from 35% to 21%, which reduces income tax expense. CWS  
6 is still evaluating the impact of the changes in the Act including the reduction in the tax rate, and  
7 it is therefore difficult to provide a simple line item reduction for just the corporate rate reduction.  
8 The Company has provided the Office of Regulatory Staff with information and data pertaining to  
9 the impact of the tax rate reductions on this case during the audit process. At this time, the  
10 Company estimates the reduction in revenue requirement using the initial Application as a result  
11 of the statutory rate change is approximately \$876,640. The problem with using that information  
12 in isolation is that it does not take into account increased tax costs CWS also may incur as a result  
13 of changes under the Act such as tax on CIAC discussed below.

14 **Q. DOES THE TAX CUT AND JOBS ACT AFFECT RATES IN ANY OTHER WAY?**

15 **A.** The Act also reduces the cost of service to customers due to the amortization of the excess  
16 Accumulated Deferred Income Taxes ("ADIT"). ADIT is the difference between the amount of  
17 tax recovered in rates and the amount of tax actually paid by the utility. When the tax rate is  
18 lowered, a portion of the ADIT will never be paid to the federal government and excess deferred  
19 taxes are created. Excess deferred taxes mean the utility charged consumers at a higher tax rate in  
20 the early years than the tax actually paid by the utility in the future. Because the excess ADIT will  
21 not be paid to the federal government, it should be held in a regulatory liability account until it is  
22 determined whether a refund to the ratepayers is appropriate.

23 **Q. HOW IS ADIT COMPUTED?**



1 A. Currently, we use a process called "normalization" in which the Internal Revenue Service  
2 ("IRS") requires specific accounting rules for calculating ADIT. The normalization provisions  
3 contained in the Internal Revenue Code ("IRC") apply to accelerated depreciation, certain excess  
4 ADIT due to reductions in income tax rate, and to the investment tax credit.

5 **Q. PLEASE EXPLAIN THE IMPACT OF ACCELERATED DEPRECIATION ON**  
6 **THE ADIT COMPUTATION.**

7 A. The accelerated depreciation provisions in the IRC provide incentives to taxpayers for  
8 investment, construction, and other economy stimulating activities. Because of accelerated  
9 depreciation, the amount of tax paid by the utility is generally less than the taxes recovered from  
10 ratepayers in the early years of an asset's life. In other words, because the customers are paying  
11 revenues based on the normal depreciation life, accelerated depreciation of an asset creates a  
12 difference between book income and ratemaking income. If an asset's depreciation is accelerated  
13 at the beginning of its life then our book income will be lower (higher depreciation expense), and  
14 therefore the income taxes paid thereon are lower. Payment of these lower taxes creates excess  
15 ADIT. Assuming the statutory tax rate remains the same over time, later in the asset's life this  
16 would reverse since the asset would become depreciated (lower actual depreciation expense)  
17 creating higher book income and higher income taxes. This normalization process is meant to  
18 equalize tax liability over the course of an assets life. The normalization rules require that the  
19 resulting ADIT be used to reduce rate base or be treated as zero cost capital in the rate of return  
20 calculation, providing ratepayers the time value benefit of the interest free loan from the U.S.  
21 Treasury.

22 **Q. DOES THE RATEPAYER BENEFIT FROM THE IMPACT OF THE TAX CUT**  
23 **ON ADIT?**

A. Another change in tax law affecting the Company concerns property or cash contributed to the Company by developers in aid of construction (CIAC). Prior to the Act, CIAC was not taxable. However, property or cash contributed by developers is now taxable. Ratepayers will benefit if the developer is required to pay the tax on the developer's contribution. Any CIAC (including tap fees) dedicated by the developer will now need to be grossed up by CWS for federal and state taxes, as is currently the practice of electric utilities. The Company plans to make a separate filing with the Commission to update its tariff language to reflect the new tax gross up requirements. There are increased tax costs associated with the elimination of the exemption for CIAC from income tax that should be considered relative to other adjustments in the Tax Reform. For example, any CIAC accepted under prior developer agreements may not provide for collection of this tax from the developer. In addition, in some instances, new infrastructure dedicated by a developer may benefit the entire system providing greater reliability of service and should be considered relative to our overall rates. This is just one reason why attempting to adopt a simple line item reduction based solely on the corporate rate reduction is appropriate.

While the ratepayers will benefit from the reduction in the corporate tax rate, CWS will be in

2 Q. WHAT RATEMAKING METHODOLOGY DOES THE COMPANY PROPOSE  
3 THAT THE COMMISSION EMPLOY IN THIS RATE CASE?

6 Q. WHY DOES CWS NEED THIS RATE INCREASE?

10 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

11     **A.**     Yes, it does.



1 **BY MR. ELLIOTT:**

2 **Q** Now, Mr. Hunter, let's turn, if we may, to your rebuttal  
3 testimony.

4 **A** [HUNTER] Okay.

5 **Q** Please identify which of the ORS's proposed adjustments  
6 CWS is contesting in this case.

7 **A** [HUNTER] All right. So we are contesting the following  
8 adjustments: 9c, which is to increase maintenance and  
9 repair for deferred purchased-water expenses. 9d, to  
10 decrease maintenance and repair to normalize sludge  
11 hauling expenses due to the consent order. 16, to  
12 amortize current and unamortized prior rate-case  
13 expenses over a three-year period. 32c, to adjust pro  
14 forma general ledger additions, pro forma plant, and pro  
15 forma retirements. The rest of the agreement – the rest  
16 of the adjustments, we either agree or decided not to  
17 contest them in this case.

18 **Q** Did you mention 32d? Did I miss it?

19 **A** [HUNTER] 32c?

20 **Q** 32c. Did you mention 32d?

21 **A** [HUNTER] I did not.

22 **Q** We're contesting the adjustment for the removal of the  
23 DHEC consent order engineering, are we not?

24 **A** [HUNTER] Yes.

25 **Q** And how about Adjustment 40?



1 A [HUNTER] For miscellaneous revenues?

2 Q Yes.

3 A [HUNTER] We are not contesting that.

4 Q We are not contesting that. Let me draw your attention,  
5 please, to your chart labeled "Contested Miscellaneous  
6 Revenue and O&M Adjustments."

7 A [HUNTER] [Indicating.]

8 MR. ELLIOTT: For the Commission, it is on the  
9 third page of his testimony, at the top.

10 WITNESS HUNTER: Okay.

11 BY MR. ELLIOTT:

12 Q Would you please tell the Commission the revenue impact  
13 of the O&M adjustments that we're contesting?

14 A [HUNTER] It's 9d, the sludge hauling expense. ORS has  
15 proposed to lower the sludge hauling expense by  
16 approximately \$97,000 – \$96,892, to be exact.

17 Late fee revenues, 40, was about \$35,576.

18 9c is the purchased-water deferral balance. ORS  
19 proposed an adjustment of \$191,034. CWS proposes  
20 \$223,269, so a difference of about \$32,000.

21 16 is related to updated rate-case expense, as well  
22 as I-20 legal-cost amortization. In total, a difference  
23 of \$14,979 for the legal-cost amortization and about  
24 \$13,651 for the updated rate-case expense.

25 Q How about with respect to rate-base adjustments, same

1 question?

2 **A** [HUNTER] 32c is related to the Friarsgate EQ liner pro  
3 forma adjustment. CWS proposes to include that at  
4 \$1,081,375.

5 And 32d related to DHEC consent order engineering.  
6 ORS has proposed to remove the \$306,552.

7 **Q** Good. Thank you. Would you please respond to the ORS  
8 proposal to adjust maintenance and repair for deferred  
9 purchased-water expenses?

10 **A** [HUNTER] Carolina Water agrees with the ORS's treatment  
11 of deferred purchased-water expense. However, we  
12 believe that the balance used to amortize should be  
13 based on the most updated information. ORS used a  
14 \$573,101 total deferral balance as of January 10, 2018.  
15 Carolina Water is proposing using a balance of \$669,808  
16 as of March 8, 2018.

17 The deferral of purchased-water expenses has  
18 benefited our customers by eliminating confusing monthly  
19 water rate adjustments, also while keeping rates lower  
20 between rate cases. Permitting Carolina Water to  
21 recover its current deferred balance as of March 8,  
22 2018, will tend to put a downward pressure on the need  
23 for future rate relief.

24 **Q** Thank you. Has the ORS included all recoverable rate-  
25 case expenses in its proposed testimony?

1 A [HUNTER] No. ORS stated the current rate-case expense  
2 is \$47,546. However, the updated cost as of March 19,  
3 2018, is \$88,500. The Commission customarily authorizes  
4 recovery of these audited rate-case expenses through the  
5 date of the hearing.

6 Q The ORS discusses in its direct testimony adjustments in  
7 federal taxes resulting from the federal corporate tax  
8 cut. Can you elaborate on the impact of the Tax Cut and  
9 Jobs Act on the company's rates?

10 A [HUNTER] Yes. So, we've been working with external tax  
11 and accounting professionals from Ernst & Young to  
12 determine what the appropriate regulatory liability and  
13 adjustment to ADIT should be.

14 At this time, Carolina Water estimates that the  
15 regulatory liability is approximately \$3.2 million. Of  
16 this \$3.2 million, approximately \$2.9 million is related  
17 to the protected portion of the balance and  
18 approximately \$250,000 is related to the unprotected  
19 portion of the balance.

20 In the creation – the creation of this regulatory  
21 liability is offset by the reduction to ADIT in rate  
22 base, so, therefore, the impact is rate-base neutral  
23 between those adjustments. The protected portion of the  
24 liability will be amortized over the life of the asset,  
25 which we have calculated 56 years using the weighted

average life of Carolina Water's protected assets. For the unprotected portion, we propose that it be amortized over three years. Generally, these assets have a shorter life, such as rate-case expenses and deferred maintenance. With this adjustment, Carolina Water has proposed that the income taxes be reduced by \$137,000. This is the estimated annual amortization amount of the regulatory liability at this time. The total revenue requirement impact from this is approximately \$183,000 after gross-up. This lowers our proposed rates, which benefits our customers. Because of the new tax laws, we also have to look at CIAC, and our understanding at this time is Carolina Water is no longer excluded from paying taxes on CIAC. We will seek to collect this from developers, the federal and state taxes on CIAC donated to Carolina Water. However, there may be circumstances, such as early in 2018, where these taxes may not be collected. This is because the applicable developer agreements in that time period do not contemplate the payment of these taxes, so any CIAC, including tap fees, donated by the developer will now need be grossed up by Carolina Water to cover these federal and state taxes.

**Q** And how do you propose to gross up these CIAC fees?

**A** [HUNTER] So, for example, using the 5 percent South Carolina tax rate with the 21 percent federal tax rate,

1       for every \$100 of CAIC, the resulting payment for taxes  
2       would be \$33.24. So, another example is Carolina  
3       Water's connection fee is \$300 per SFE. The impact fee  
4       is \$400 per SFE. Thus, the impact of the Act on CIAC  
5       will require that a payment of \$232.68 per SFE is taken  
6       at the time of connection. We believe that this cost  
7       should be borne by the customer responsible for the  
8       cost. So Carolina Water proposes that customers who  
9       connect to its water and wastewater system pay these  
10      costs in addition to the connection and impact fees at  
11      the time of connection.

12   **Q**   Very fine. Does this conclude your testimony?

13   **A**   [HUNTER] Yes, sir.

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23   [PURSUANT TO PREVIOUS INSTRUCTION, THE  
24   PREFILED REBUTTAL TESTIMONY OF ROBERT M.  
25   HUNTER FOLLOWS AT PGS 276-281]

- (9c) To increase maintenance and repair for deferred purchased water expenses.
- (9d) To decrease maintenance and repair to normalize sludge hauling expense due to consent orders with DHEC.
- (16) To amortize current and unamortized prior rate case expenses over a three-year period.
- (32c) To adjust pro-forma general ledger additions, pro-forma plant, and pro-forma retirements.
- (32d) To adjust for the removal of DHEC Consent Order (CO) Engineering.
- (40) To adjust miscellaneous revenues for ORS's recalculation of the Company's proposed rate increase.



**Q. PLEASE EXPLAIN HOW CWS' APPLICATION IS AFFECTED BY ITS DECISION NOT TO CONTEST SOME OF ORS' ADJUSTMENTS?**

After CWS' adjustments the resulting increase in revenues is \$1,076,375 and \$1,343,886 for water and sewer respectively, \$2,420,261 in total as seen in "Hunter - Exhibit B". Therefore, CWS' requested revenue will have been reduced by \$2,176,388.

**Q. WHAT ARE THE AMOUNTS OF THE ADJUSTMENTS OVER WHICH THE COMPANY DISAGREES WITH ORS?**

A. The Company is contesting items that impact Miscellaneous Revenues, O&M and Rate Base. The below charts display the adjustments being contested by the Company and the difference between ORS' and CWS' proposed amounts for each adjustment:

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6 Q. ORS DISCUSSES ADJUSTMENTS IN FEDERAL INCOME TAXES  
7 RESULTING FROM THE FEDERAL CORPORATE TAX CUT. CAN YOU  
8 ELABORATE ON THE IMPACT OF THE TAX CUT AND JOBS ACT ON THE  
9 COMPANY'S RATES? (PAYNE PAGE 15, LINE 10-ADJUSTMENT 27).

The Act also reduces the cost of service to customers due to the amortization of the excess Accumulated Deferred Income Taxes (“ADIT”). When the tax rate is lowered, a portion of the ADIT will never be paid to the federal government and excess deferred taxes are created. Excess deferred taxes mean the utility charged consumers at a higher tax rate in the early years than the tax actually paid by the utility in the future. Because the excess ADIT will not be paid to the federal government, it should be held in a regulatory liability account until it is determined whether a refund to the ratepayers is appropriate. The Company has been working with external tax and accounting professionals to determine the appropriate regulatory liability and adjustment to ADIT. At this time, CWS estimates that the regulatory liability amount is \$3,229,909, which

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Because of the new tax laws, it is the Company's understanding at this time that CWS is no longer excluded from paying taxes on Contributions in Aid of Construction ("CIAC"). CWS will seek to collect from the Developer federal and state taxes on CIAC donated to CWS; however, there may be circumstances in which such taxes may not be collected for CIAC contributed early in 2018 because the applicable Development Agreements did not contemplate payment of these taxes. Any CIAC (including tap fees) donated by the Developer will now need to be grossed up for federal and state taxes.

A. The Company will gross-up cash service availability charges and property contributions in aid of construction in order to recover the federal and state corporate income taxes associated with those contributions. The formulae to be used to gross-up cash service availability charges and contributed property are as follows:



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A. Yes.

1                   **MR. ELLIOTT:** All right, gentlemen. I think  
2                   at this point Mr. Terreni will direct questions to  
3                   Mr. Cartin.

4                   **DIRECT EXAMINATION**

5                   **BY MR. TERRENI:**

6                   **Q**     Mr. Cartin, would you please state your name and  
7                   occupation?

8                   **A**     [CARTIN] My name is Michael Cartin. I'm the Operations  
9                   and Regulatory Affairs manager for Carolina Water  
10                  Service.

11                  **Q**     Mr. Cartin, did you prepare or cause to be prepared 13  
12                  pages of prefiled direct testimony in this case?

13                  **A**     [CARTIN] I did.

14                  **Q**     Do you have any changes or corrections you wish to make  
15                  to that testimony?

16                  **A**     [CARTIN] I do not.

17                  **Q**     If I were to ask you the questions in that testimony,  
18                  would your answers be the same as if given orally from  
19                  the stand today?

20                  **A**     [CARTIN] Yes.

21                  **MR. TERRENI:** Mr. Chairman, I would move the  
22                  introduction of Michael Cartin's direct testimony  
23                  into evidence.

24                  **CHAIRMAN WHITFIELD:** Mr. Cartin's direct –  
25                  prefiled direct testimony will be entered into the

1 record as if given orally from the stand.

2 **BY MR. TERRENI:**

3 **Q** All right. Mr. Cartin, did you prepare or cause to be  
4 prepared five pages of rebuttal testimony in this case?

5 **A** [CARTIN] Yes.

6 **Q** Do you have any changes or corrections you wish to make  
7 to your rebuttal testimony?

8 **A** [CARTIN] I do not.

9 **Q** And if I were to ask you the questions contained in the  
10 rebuttal testimony, would your answers be the same today  
11 if given orally from the stand?

12 **A** [CARTIN] Yes.

13 **MR. TERRENI:** Mr. Chairman, I'd move the  
14 admission of Michael Cartin's rebuttal testimony  
15 into evidence.

16 **CHAIRMAN WHITFIELD:** Mr. Cartin's rebuttal  
17 testimony will be entered into the record as if  
18 given orally from the stand.

19 **BY MR. TERRENI:**

20 **Q** Okay. Mr. Cartin, it's labeled "surrebuttal testimony,"  
21 but I think we intended to label it "supplemental  
22 testimony." Did you prepare or cause to be prepared  
23 three pages of supplemental testimony in this case –  
24 that was filed in this case?

25 **A** [CARTIN] I did.

1 **Q** Do you have any changes or corrections you wish to make  
2 to that testimony?

3 **A** [CARTIN] I do not.

4 **Q** And if I were to ask you the questions in that  
5 testimony, would your answers be the same if you gave  
6 them orally from the stand?

7 **A** [CARTIN] Yes.

8 **MR. TERRENI:** Mr. Chairman, I would move – oh.

9 **BY MR. TERRENI:**

10 **Q** And is there an exhibit to that testimony?

11 **A** [CARTIN] Yes.

12 **MR. TERRENI:** Mr. Chairman, I would move to  
13 introduce into evidence the supplemental testimony  
14 of Michael Cartin as if given orally from the  
15 stand. However, Mr. Chairman, in deference to the  
16 ORS's objection, I would – with leave from the  
17 court – I would concede to striking page two, lines  
18 3 through 26, from Mr. Cartin's testimony, and we  
19 will withdraw the exhibit.

20 **CHAIRMAN WHITFIELD:** Page two, lines 3 through  
21 26, Mr. Terreni?

22 **MR. TERRENI:** Yes, Mr. Chairman.

23 **CHAIRMAN WHITFIELD:** And did I understand you  
24 to say the exhibit, also, you're –

25 **MR. TERRENI:** We will withdraw the exhibit, as

1 well, Mr. Chairman.

2 **CHAIRMAN WHITFIELD:** Mr. Nelson, does that  
3 satisfy your objections –

4 **MR. NELSON:** Mr. Chairman, I'm still not happy  
5 with page three, lines five through seven.  
6 However, in the interest of judicial economy, I  
7 think we'll just move forward. I'll have the  
8 opportunity to cross-examine Mr. Cartin on that, so  
9 that's fine.

10 **CHAIRMAN WHITFIELD:** Mr. Nelson, are you  
11 withdrawing your objection to page three?

12 **MR. NELSON:** Yes, sir, based on Mr. Terreni's  
13 removing the other portions off page two and the  
14 exhibit, I'll withdraw the remainder of the  
15 objection.

16 **CHAIRMAN WHITFIELD:** Well, we have a  
17 compromise.

18 Well, Mr. Terreni, on that note, we will enter  
19 the surrebuttal testimony, minus page two, lines 3  
20 through 26, that you so noted, and there is no  
21 exhibit to enter, going forward.

22 **MR. TERRENI:** Thank you, Mr. Chairman.

23 **CHAIRMAN WHITFIELD:** All right. Thank you,  
24 Mr. Terreni.

25 <

1 **BY MR. TERRENI:**

2 **Q** Mr. Cartin.

3 **A** [CARTIN] Yes, sir.

4 **Q** Tell us again your position with the company. We may  
5 have forgotten it, after all that?

6 **A** [CARTIN] I'm the Operations and Regulatory Affairs  
7 manager for Carolina Water Service.

8 **Q** And what are your duties as the Operations and  
9 Regulatory Affairs manager?

10 **A** [CARTIN] I oversee the direction of our field staff, I  
11 work on the capital and O&M budgets, and I also manage  
12 activities here at the PSC.

13 **Q** What did you do before working – when did you start  
14 working for Carolina Water Service?

15 **A** [CARTIN] In July of 2014.

16 **Q** What did you do before that?

17 **A** [CARTIN] I started my career working for the South  
18 Carolina Office of Regulatory Staff, for about four and  
19 a half years, as an electric utility specialist. I've  
20 testified in front of this Commission on multiple fuel  
21 clause adjustment hearings, as well as rate cases. I  
22 worked for Citizens Bank for a little over a year after  
23 leaving ORS. And I joined Carolina Water Service as a  
24 financial analyst and was promoted to Operations and  
25 Regulatory Affairs manager later.



1 Q What's your educational background?

2 A [CARTIN] I studied Finance at the State of South  
3 Carolina's flagship university, the University of South  
4 Carolina here at Columbia.

5 Q As an in-state student?

6 A [CARTIN] I did.

7 Q Congratulations.

8 A [CARTIN] Thank you.

9 Q There aren't many of those left. And you graduated,  
10 correct?

11 A [CARTIN] Yes sir.

12 Q Mr. Cartin, you cover several subjects in your testimony  
13 and I'm just going to propose that we take them topic by  
14 topic and let you – and I'll walk you through them, for  
15 the benefit of the Commission. You testified regarding  
16 the effects of purchased – of purchased-water price  
17 increases on the company's revenue requirement. And,  
18 specifically, I think you talked about the City of West  
19 Columbia. Could you elaborate on that for the  
20 Commission?

21 A [CARTIN] Yes. In November of 2016, we received a rate  
22 increase from the City of West Columbia for our  
23 purchased water. It went from \$3 per thousand gallons  
24 up to \$5 per thousand gallons, which is over a 66  
25 percent increase. It's a large driver in this rate

1 case.

2 **Q** And what's the effect, on the revenue requirements of  
3 the company, of that increase?

4 **A** [CARTIN] That increase equates to approximately \$½  
5 million a year in O&M increases.

6 **Q** And does Carolina Water Service have anywhere else to  
7 purchase water for these customers?

8 **A** [CARTIN] Not at this time.

9 **Q** Who are the customers that received this?

10 **A** [CARTIN] Our I-20 service area.

11 **Q** In the I-20 service area?

12 **A** [CARTIN] Yes.

13 **Q** Michael, the company has withdrawn its request for a  
14 USIR charge; is that correct?

15 **A** [CARTIN] That's correct. Commissioners, you might have  
16 heard it called a DISC. It's something very similar but  
17 just a different acronym.

18 **Q** And what does "USIR" stand for?

19 **A** [CARTIN] Utility system improvement rate.

20 **Q** I'm glad you remembered that, because I didn't. Do you  
21 have any plans or does the company have any plans with  
22 regard to the USIR charge, in bringing the charge before  
23 the Commission?

24 **A** [CARTIN] Not in this case, but we will be seeking the  
25 issue in a generic proceeding at a later time.

1 Q Okay, thank you. I'd like to talk about the I-20  
2 system. First of all, what is the I-20 system, for  
3 everybody's benefit?

4 A [CARTIN] I'm assuming you're talking about water. We  
5 have water and sewer customers, but –

6 Q Okay.

7 A [CARTIN] – that's what I'm assuming.

8 Q I'm talking about both.

9 A [CARTIN] Okay. We previously served sewer service to  
10 approximately 2200 customers in Lexington. They are no  
11 longer our customers. We also serve, roughly, between  
12 3000-4000 customers water service, which we purchase  
13 from the City of West Columbia and transport it to our  
14 customers.

15 Q Okay. And who is providing sewer service to these  
16 customers now?

17 A [CARTIN] The Town of Lexington.

18 Q Okay. And were there legal proceedings related to the  
19 I-20 system?

20 A [CARTIN] Yes.

21 Q Can you tell us about those proceedings? What are they?

22 A [CARTIN] As we stated earlier, I'm not an attorney, so I  
23 brought some notes, but there are a few different cases  
24 going on. The first one, while they're now Town of  
25 Lexington customers, is a condemnation proceeding. The

1 Town of Lexington issued a condemnation against CWS for  
2 its I-20 sewer system on October 9th. The company did  
3 not oppose the condemnation; in fact, we supported it  
4 and worked quickly to get them everything they needed to  
5 transfer the system and get that pipe out of the lower  
6 Saluda River. So that's one of the cases.

7 There's a few other cases, which I look at they're  
8 all sort of related, and these are costs that I've  
9 deferred into this I-20 litigation-cost bucket. The  
10 first one is *Congaree Riverkeeper versus Carolina Water*  
11 *Service*. That's in federal court, to remove the  
12 discharge in the lower Saluda.

13 Q Is that case still pending?

14 A [CARTIN] It is.

15 Q And what's the latest development in that case?

16 A [CARTIN] The parties have reached out to each other and  
17 are working towards meeting to discuss settlement in the  
18 near future.

19 Q How about the fine?

20 A [CARTIN] The fine was vacated by Judge Seymour just  
21 recently. The \$1.5 million fine has been vacated.

22 Q So the case is still ongoing; she's going to hear  
23 arguments on that fine?

24 A [CARTIN] Correct.

25 Q And how about the condemnation? Is that finished?

1 A [CARTIN] It is not.

2 Q What remains to be done in the condemnation?

3 A [CARTIN] It's gone to court to determine a fair market  
4 value for the price of the system.

5 Q [CARTIN] And there were a couple of actions of the  
6 Administrative Law Court, I believe. Were they related  
7 to I-20, as well?

8 A [CARTIN] Yes, they were. There was one case at the ALC  
9 where they had a review of DHEC's denial of our permit  
10 renewal on the I-20 sewer system. There was also a case  
11 heard at the ALC where the Town's challenge of the DHEC  
12 order relating to the I-20 connection – and also  
13 *Carolina Water versus EPA and the Town of Lexington*  
14 where basically we had asked them to compel the Town to  
15 interconnect with us.

16 Q Did you have lawyers in all these cases?

17 A [CARTIN] I did.

18 Q Did you have to pay them?

19 A [CARTIN] Yes, sir.

20 Q Okay. Are you asking for recovery of the fees in those  
21 cases?

22 A [CARTIN] We are.

23 Q And how much is that amount?

24 A [CARTIN] It's just under a million dollars.

25 Q What impact would the amount – would recovery of those

1 fees have? How do you propose to recover on that?

2 **A** [CARTIN] In this case, we proposed to get recovery of

3 these expenses through amortization expense over 66-2/3

4 years, which is consistent with the depreciation

5 schedule of our assets on our system. The reason we

6 propose this is because, in the last rate case, we had

7 similar legal fees for the same case, and that's the way

8 they were handled and approved by this Commission.

9 **Q** Okay. Am I one of those lawyers?

10 **A** [CARTIN] You're not, Charlie.

11 **Q** Okay. I just want to make that clear. Is there any way

12 that Carolina Water Service could recoup some of these

13 fees from other sources?

14 **A** [CARTIN] Yes.

15 **Q** How's that?

16 **A** [CARTIN] In the condemnation proceeding, if we prevail

17 closer to the value of the asset of the system –

18 **Q** I don't mean to ask you for a legal opinion, but you

19 understand you might be able to recover some fees in the

20 condemnation.

21 **A** [CARTIN] Yeah, typically in condemnation cases –

22 **Q** Right.

23 **A** [CARTIN] – the prevailing party will get recovery of

24 their legal fees.

25 **Q** That's just your understanding.

1 A [CARTIN] Yeah. And if we were to recover legal fees, we  
2 would credit them –

3 Q Okay.

4 A [CARTIN] – against this balance –

5 Q And that's my point.

6 A [CARTIN] – and refund that to the customers.

7 Q What would happen again? I'm sorry, I was talking over  
8 you. If you were to recover some fees in the  
9 condemnation case, what would happen?

10 A [CARTIN] We would refund those to the customers and  
11 credit them against our legal expense account.

12 Q Because that legal expense account stretches out for,  
13 what, you said 65 years or something like that?

14 A [CARTIN] Sixty-six and two-thirds [66-2/3] years is a  
15 1.5 percent depreciation rate.

16 Q So you would lower the balance on that account.

17 A [CARTIN] Correct.

18 Q Okay. How about Friarsgate? Are you in litigation over  
19 Friarsgate?

20 A [CARTIN] Yes.

21 Q And what is the status of that case?

22 A [CARTIN] The River Runner Outdoor Center has made a case  
23 in county court; it's being handled by our insurance  
24 carrier.

25 Q So are you seeking recovery of any expenses for the



1 Friarsgate litigation?

2 A [CARTIN] No, sir.

3 Q All right. Well, to change topics, your testimony  
4 speaks of an issue you had with a meter reader, I  
5 believe in the I-20 system area. What happened with the  
6 meter reader?

7 A [CARTIN] We had a meter reader, what we call, doing  
8 ghost reads. He basically wasn't going out and reading  
9 the meter and he was estimating reads. He was doing  
10 this from the time of April 2017, and we discovered in  
11 August 2017 that he was not actually reading the meters  
12 to approximately a thousand customers here in the  
13 Midlands – a thousand customers. I'm sorry.

14 Q You said a thousand?

15 A [CARTIN] Yeah.

16 Q And what subdivisions were affected?

17 A [CARTIN] It was the Watergate Subdivision, Rollingwood,  
18 Brighton Forest, Planter's Station, and Golden Pond.

19 Q And, again, what was that time period?

20 A [CARTIN] April of 2017 until August 2017 was the time  
21 this contracted meter reader was working for us.

22 Q How did you learn about the problem?

23 A [CARTIN] His manager brought it to our attention.

24 Q And when the manager brought it to your attention, what  
25 did Carolina Water Service do about it?

1     **A**     [CARTIN] We did a few things. The first thing we did  
2           was make sure that the employee was terminated. I then  
3           issued my field staff to go out and re-read every meter  
4           that was affected or could possibly have been affected,  
5           to get a true-up read, and then we issued new bills  
6           based on actual usage and actual reads. We also sent  
7           letters out to our customers, alerted our customer  
8           service representatives of the issue, and tried to  
9           proactively manage issues as we understood they would  
10          come in from the field. We offered payment plans to  
11          anybody who had a higher-than-normal bill.

12    **Q**     Let me ask you, explain what a true-up read is, because  
13           it wasn't clear to me initially.

14    **A**     [CARTIN] Well, it's an actual read of the meter, not an  
15           estimate.

16    **Q**     Okay.

17    **A**     [CARTIN] And, you know, our water meters run – you know,  
18           in April when it was read at 1000, the next four months  
19           they were estimated. We went out and got an actual  
20           read, which may have said 10,000 on the meter, so we  
21           were able to determine actual usage for that time period  
22           and reissue bills to everyone that reflect actual usage.

23    **Q**     Thank you.

24    **A**     [CARTIN] No customers were billed for water they did not  
25           use.

1 Q Thank you. Have you taken any measures to ensure this  
2 kind of thing doesn't happen again?

3 A [CARTIN] Yes. We did a few different things. The first  
4 thing I required from our contractor was that his hiring  
5 process meet the standards of the same as we would hire  
6 someone, so we required any new employees who are going  
7 to read our meters to be required to do background  
8 checks and pass a drug screening. Another thing I  
9 implemented was having our field staff go behind meter  
10 readers and spot-check a few, to make sure they were  
11 actually going out and physically reading the meters.  
12 We ran a couple of different reports quarterly to look  
13 at consumption: zero read reports, so we can identify  
14 meters that are stuck, things like that.

15 Q Thank you. I'd like to – along the vein of customers  
16 and your communications with them, since the last rate  
17 case, has the company taken any measures to try to  
18 improve its communications with its customers?

19 A [CARTIN] Yes, we have.

20 Q Could you please describe those for the Commission?

21 A [CARTIN] One of the first things we did was hire a  
22 communications coordinator, and his job is to  
23 proactively reach out to HOAs, customers, key  
24 stakeholders in our service areas, and educate them on  
25 what we're doing, what's going on, develop

1 relationships, just have a more proactive approach to  
2 our communications here in South Carolina.

3 **Q** Have you had any meetings with customers?

4 **A** [CARTIN] Yes. For this rate case, we held town hall  
5 meetings. Up in York County, that's right in the middle  
6 of our River Hills Subdivision, at Camp Thunderbird –  
7 y'all have been there before. We held a town hall  
8 meeting in Columbia and in the Greenville/Anderson  
9 areas, and we did two rounds. The first round was a  
10 formal presentation where we talked about the rate case  
11 and stayed after to talk about service, any service  
12 issues or just got to know our customers. So the first  
13 round was a very formal presentation. And then we did  
14 another round a couple of weeks before the actual Public  
15 Service Commission night hearings, and these were more  
16 of a drop-in format, so I had members from all different  
17 areas of our company available, set up at booths, to  
18 just meet one-on-one to talk with customers. So we did  
19 two rounds of town halls in three different areas.

20 **Q** Now the company has a franchise agreement in York  
21 County, or has had one historically. Can you tell the  
22 Commission the status of the franchise agreement that  
23 Carolina Water Service has with York County?

24 **A** [CARTIN] We've executed a franchise agreement and we are  
25 seeking approval from the Public Service Commission for

1 approval of the franchise agreement.

2 **Q** Has the York County Council voted on the franchise  
3 agreement?

4 **A** [CARTIN] Yes, they approved it unanimously.

5 **Q** Thank you. You've requested some changes to the service  
6 conditions of Carolina Water Service's tariff, regarding  
7 interruption of service. Could you please explain those  
8 changes to the Commission and why you're asking for  
9 them?

10 **A** [CARTIN] We just want to make it clear that disputes  
11 involving interruption of service are handled by the  
12 Commission and not the courts.  
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23 [PURSUANT TO PREVIOUS INSTRUCTION, THE  
24 PREFILED DIRECT TESTIMONY OF MICHAEL R.  
25 CARTIN FOLLOWS AT PGS 299-311]









FACEBOOK EARL PROCHESKY - 2018 Aug 5 3:02 PM PST SCPS061201# 2012-1182-1896 B307 232 13

**Q. CWS HAS REQUESTED PERMISSION TO IMPLEMENT A UTILITY SYSTEM IMPROVEMENT RATE. WHAT IS A UTILITY SYSTEM IMPROVEMENT RATE?**



1

Sewer Territory	
Net Investor Supplied Sewer Additions	USIR Flat Rate
\$500,000	\$0.42
\$1,000,000	\$0.83
\$1,500,000	\$1.25
\$2,000,000	\$1.66
\$2,500,000	\$2.08
\$3,000,000	\$2.50
\$3,500,000	\$2.91
\$4,000,000	\$3.33
\$4,500,000	\$3.74
\$5,000,000	\$4.16
\$5,500,000	\$4.57
\$6,000,000	\$4.99
\$6,500,000	\$5.41
\$7,000,000	\$5.82
\$7,500,000	\$6.24
\$7,907,595	\$6.58

2

3 **Q. WHY DOES THE COMPANY WANT A USIR?**

4 A. A USIR will benefit CWS customers by improving service reliability, improving and  
 5 protecting water quality, improving system resiliency, and creating rate stability. By implementing  
 6 a mechanism that promotes proactive investment of capital, the USIR will help improve quality of  
 7 service to customers through accelerated replacement of aging infrastructure. The USIR would  
 8 also facilitate more gradual rate changes, and may enable the Company to increase the length of  
 9 time between general rate cases. Fewer rate filings will reduce the expenses to customers  
 10 associated with the regulatory process.

11 **Q. WHEN WOULD THE USIR BE DETERMINED?**

12 A. In the first quarter of each year after this rate case, CWS would apply with the Commission  
 13 requesting recovery of qualifying capital through a USIR. The Office of Regulatory Staff ("ORS"),



and any other interested parties, would review and comment on the Company's expenditures. If, after notice to customers and an opportunity to be heard, the Commission finds the expenditures prudent and reasonable, the Company would be allowed to earn a return on prudent investments through a USIR. The Commission would determine the appropriate schedule for these proceedings, but CWS suggests they could be completed within 90 to 180 days, depending on whether there is opposition to the Company's request.

**Q. WHEN WOULD THE USIR APPEAR ON A CUSTOMER'S BILL?**

A. After the Commission approves the charge.

**Q. WILL A USIR ENHANCE CWS'S SUPPORT OF SOUTH CAROLINA'S ECONOMIC DEVELOPMENT?**

A. Yes. South Carolina's population is growing rapidly. Migration to the state over the past five years is the fifth highest rate in the United States.<sup>1</sup> For South Carolina, that means current water infrastructure is increasingly stretched and supplying citizens and businesses with enough clean water is a challenge to support the pace of growth. The cost of drinking water infrastructure improvement in South Carolina is estimated at \$1.8 billion over the next 20 years.<sup>2</sup> According to the American Society of Engineers:

"This deteriorating infrastructure impedes South Carolina's ability to compete in an increasingly global marketplace. Success in a 21st century economy requires serious, sustained leadership on infrastructure investment at all levels of government. Delaying these investments only escalates the cost and risks of an aging infrastructure system, an option that the country, South Carolina, and families can no longer afford."<sup>3</sup>

<sup>1</sup> "Best States for Business". (<https://www.forbes.com/places/sc/>)

<sup>2</sup> American Society of Engineers. "Infrastructure in South Carolina" (<https://www.infrastructurereportcard.org/state-item/south-carolina/>).

<sup>3</sup> American Society of Engineers. "Infrastructure in South Carolina" (<https://www.infrastructurereportcard.org/state-item/south-carolina/>).

**Q. HAS THE TOWN OF LEXINGTON BROUGHT A CONDEMNATION ACTION OF THE I-20 WASTEWATER TREATMENT SYSTEM?**

**Q. WHAT IS THE IMPACT OF THE I-20 CONDEMNATION ON CWS' REQUEST FOR RATE RELIEF?**

7



1 revenue numbers mentioned above reflect the recent tax reform mentioned in more detail in Robert  
2 Hunter's direct testimony.

3 **Q. PLEASE TELL US THE STATUS OF LITIGATION INVOLVING DISCHARGES**  
4 **FROM THE FRIARSGATE PLANT.**

5 **A.** The River Runner Outdoor Center, Inc. and a group of other businesses who assert that  
6 they use and benefit from recreational use of and access to the Saluda River sued CWS in the South  
7 Carolina Court of Common Pleas in Richland County asserting claims for nuisance and violations  
8 of the Unfair Trade Practices Act (C/A 2017-CP-40-04611). Plaintiffs seek to recover actual and  
9 punitive damages they claim were directly caused by CWS's acts or omissions in discharging into  
10 the Saluda River. CWS has tendered the matter to its insurance carrier which currently is providing  
11 a defense. Counsel for CWS has moved to dismiss the action, but no date has been set for a hearing  
12 on that motion.

13 **Q. CWS HAS EXPERIENCED SOME DIFFICULTY WITH ITS METER READING**  
14 **CONTRACTOR. PLEASE EXPLAIN WHAT HAPPENED.**

15 **A.** In September of 2017, the Company discovered one of its contracted meter readers was  
16 not reading our customer's meters. The Company cannot be certain but believes the contractor  
17 "ghost read" meters in Brighton Forest, Planters Station, Golden Pond, Rollingwood and  
18 Watergate subdivisions. The contractor read meters from April to August of 2017 before being  
19 terminated. This affected approximately 1,000 customers. Once the issue was discovered, the  
20 Company issued rereads to all customers affected and "true up" bills were issued after accurate  
21 meter reads were taken. The Company sent letters to all affected customers and payment plans  
22 were offered to customers that received a higher than normal bill due to the true up.



**Q. WHAT HAS CWS DONE TO ADDRESS THE PROBLEM WITH THE METER READER?**

A. CWS immediately took steps to prevent this problem from reoccurring. First, CWS demanded the immediate termination of the employee. Second, the Company held multiple meetings with our meter reading contractor. The purpose of these meetings was to understand the root cause of what happened and, more important, to implement additional procedures to prevent this activity from happening again. This is a list of some of the additional measures:

**1. Enhanced hiring process**

The contractor has put into place an enhanced hiring process to help ensure that only the most appropriate contract employees are hired.

**2. Random verification of meter reads**

CWS is implementing a new process that creates field activities to perform reads for randomly selected addresses. This will provide additional oversight and will allow the Company's operators to audit our contractor and validate that the meters are being read accurately. New field activities were distributed to field staff starting in November 2017 to verify reads at randomly selected premises.

**3. Monthly reports from contractor**

Our contractor is now responsible for monthly reports stating any problem areas or issues it experiences in the field when reading meters.

**4. Review of customer service data**

The Company is reviewing call records and monthly customer service reports to look for and respond to trends in high bill complaints and meter reading inaccuracies.

**5. "Zero consumption" reports**

The Company will run a monthly "zero consumption" report and distribute to operations to check for stuck meters.

**6. "Estimated read report"**

The Company will run an "Estimated Read Report" quarterly to check for compliance with regulations on multiple estimates at the same premise.

**Q. PLEASE PROVIDE AN UPDATE ON CWS'S CUSTOMER OUTREACH SINCE THE LAST RATE CASE.**

1 A. As part of the Company's commitment to improve communications with its customers,  
2 CWS organized and held three public town hall meetings to summarize the rate request, answer  
3 customer questions and take customer feedback. The meetings were held in Lexington County,  
4 York County and Anderson County. All customers, local elected officials, and various  
5 stakeholders were invited to attend. Besides providing input on the rate case, attendees were also  
6 provided contact information for CWS's local Communications Coordinator, who has fielded  
7 numerous inquiries since the meetings. A follow-up letter was sent to all those that signed in to  
8 let them know that the Company appreciated their input and would hold more meetings on the  
9 case. CWS held a follow-up meeting on February 21, 2018 in Irmo, and has scheduled two more  
10 meetings in Lake Wylie and Greenville. These meetings are drop-ins for customers to speak one-  
11 on-one with CWS representatives and to get their feedback and answer questions about the rate  
12 case, customer service issues, CWS's work in the community and any other topics of interest.

13 CWS is also an active member of the Midlands River Coalition. The Coalition is  
14 comprised of many stakeholders who have joined to start an enhanced monitoring program for the  
15 Lower Saluda River during the recreational season. The goal of the Coalition is to ensure safety  
16 of individuals using the river and to educate the public on issues related to natural waters. The  
17 Coalition also strives to provide accessible data to river users, so they can make informed decisions  
18 on when to use the river for recreational activities.

19 **Q. CWS HAS REQUESTED APPROVAL OF A FRANCHISE EXTENSION IN YORK**  
20 **COUNTY IN A SEPARATE DOCKET. PLEASE SUMMARIZE THE YORK COUNTY**  
21 **PROPOSED FRANCHISE RENEWAL AND TERMS.**





1 through basis for this area. CWS had to wait for receipt of the bulk wastewater invoice from  
 2 BJWSA to initiate the manual process to calculate and input the variable supply rate into the billing  
 3 system each month. Because of the delay in receiving the bulk provider invoice, there was a  
 4 corresponding delay between the service period end date and the bill issuance date of  
 5 approximately 60 days. In Order No. 2015-876, the Commission approved a flat wastewater  
 6 charge of \$52.93 per unit for residential service and elimination of the pass-through rate  
 7 mechanism. The Company no longer had to wait on the bulk water invoices to send bills to its  
 8 customers. When the new tariff took effect, many bulk water customers like the Dancing Dolphin,  
 9 were being billed on the lagging schedule caused by the old pass-through tariff. In February 2016,  
 10 CWS began moving the bill date up slightly each month to eliminate the lag. This process,  
 11 completed by January of 2018, resulted in the Dancing Dolphin receiving thirteen bills in 2017.  
 12 We understand how this process could give rise to confusion, and have extended a one month bill  
 13 credit to the Dancing Dolphin's accounts as a goodwill gesture.

14 **Q. WHY IS THE COMPANY REQUESTING NEW LANGUAGE IN ITS TARIFF**  
 15 **REGARDING LIABILITY FOR INTERRUPTION OF SERVICE IN ITS TARIFF?**

16 **A.** The proposed language, found in Exhibit A, on p. 6, Section 1.I and on p. 10 in Section  
 17 1.G, notifies customers of the Commission's jurisdiction over disputes concerning interruption of  
 18 service. The Commission regulates Standards and Quality of Service of water utilities in Article  
 19 7, Subarticle 7 and wastewater utilities in Article 5, Subarticle 7 of Chapter 103 of the South  
 20 Carolina Code of Regulations. Interruption of service is regulated in S.C. Code Reg. § 103-771  
 21 and §103-551. The Commission's regulations concerning Customer Relations in Article 7,  
 22 Subarticle 4, and Article 5, Subarticle 4, provide remedies for interruption of service. Limiting

- 1 the remedies for interruption of service to those provided in the regulations will eliminate the  
2 prospect of unnecessary litigation and result in cost savings that ultimately benefit our customers.

3 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

- 4 **A.** Yes, it does. I would like to thank the Commission for hearing our case.



1 **BY MR. TERRENI:**

2 **Q** In your rebuttal testimony, you mentioned a change in  
3 charges for irrigation-meter customers that you plan to  
4 implement. I don't think it's opposed by the Office of  
5 Regulatory Staff, but it came up in rebuttal. Can you  
6 please explain what you plan to do and why?

7 **A** [CARTIN] Sure. This is really in response to some of  
8 the town hall meetings, particularly a lot of the one-  
9 on-one conversations I had with our customers in the  
10 River Hills Subdivision. These customers have two  
11 meters on their system, and one is for irrigation only  
12 and the other one is for the water that actually goes  
13 into their home. Previously, before the last rate case,  
14 they were billed sewer based off consumption. In the  
15 last rate case, we approved flat-rate sewer. Therefore,  
16 these customers that have an irrigation meter, they no  
17 longer receive that benefit of having an irrigation  
18 meter. Before, their issue was, "We are paying for  
19 water for sewer, but all we're doing is watering our  
20 lawn," and with the change in rates they no longer  
21 receive the benefit of that irrigation meter, so the  
22 company is proposing that we waive that base facilities  
23 charge associated with the irrigation meter, because our  
24 customers no longer receive a benefit. It's about 220  
25 customers in River Hills that have an irrigation meter.



1 Q Okay. You also responded to a proposed adjustment  
2 regarding the installation of an EQ liner at the  
3 Friarsgate plant? Is that right?

4 A [CARTIN] Yes.

5 Q And the ORS, as I understand it, proposed to exclude  
6 costs associated with these improvements associated with  
7 the installation of the new EQ liner at the Friarsgate  
8 plant. You are disputing that adjustment. Could you  
9 please explain why?

10 A [CARTIN] Yes. ORS's position is that it's not currently  
11 in service and, therefore, shouldn't be dealt with in  
12 this case but the next one.

13 Q What is not currently in service?

14 A [CARTIN] The EQ liner.

15 Q Okay. And your position is?

16 A [CARTIN] My position is that it is benefiting our  
17 customers. We were required by a DHEC consent order to  
18 replace the EQ liner. So what we did was we removed the  
19 EQ liner and began the environmental remediation portion  
20 of the project, which required the soils underneath the  
21 liner to be removed of and disposed of properly. And  
22 while the project was not complete by the audit cutoff  
23 date in this rate case, we were able to finish the  
24 environmental remediation portion, which puts us in  
25 environmental compliance, which I believe is a benefit

1 to our customers and the surrounding communities, so I  
2 believe that it should be included in this rate case.

3 It's about a million dollars in capital investments, and  
4 receiving it in this rate case, as well, helps with the  
5 gradualism of rates, so we won't be seeking it in the  
6 next case.

7 **Q** What would the impact on revenues of that million  
8 dollars in rate base be there?

9 **A** [CARTIN] Approximately \$70,000. Sixty-eight and change.

10 **Q** ORS has also proposed to remove some engineering costs  
11 that were incurred at the Friarsgate plant. Could you  
12 please respond to that adjustment?

13 **A** [CARTIN] Yes. ORS proposes to remove \$306,000 of  
14 engineering costs at our Friarsgate wastewater treatment  
15 facility because it was required per a consent order.  
16 My position is the fact that it was required per a  
17 consent order does not mean that it isn't benefiting our  
18 customers. I believe it should be included in plant-in-  
19 service.

20 **Q** And what would the impact on the company's revenues be  
21 of that \$306,000?

22 **A** [CARTIN] It equates to approximately \$19,000 in revenue  
23 requirement.  
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[PURSUANT TO PREVIOUS INSTRUCTION, THE  
PREFILED REBUTTAL TESTIMONY OF MICHAEL R.  
CARTIN FOLLOWS AT PGS 316-320]



**Q. ORS RECOMMENDS THAT CWS COMPLETE AN INFLOW AND INFILTRATION STUDY AND COSTS BENEFITS ANALYSIS FOR THE SEWER SYSTEM SERVING PROPERTIES OWNED BY DANCING DOLPHIN, LLC. WHAT IS CWS' POSITION? (SCHELLINGER PAGE 17, LINE 1).**



3 Q. ORS PROPOSES TO ADJUST GROSS PLANT IN SERVICE FOR NET PLANT  
4 ADDITIONS FOR ADDITIONS TO THE FRIARSGATE WASTEWATER TREATMENT  
5 FACILITY (WWTF). PLEASE ADDRESS ORS' PROPOSED ADJUSTMENTS. (PAYNE  
6 PAGE 17, LINE 5- ADJUSTMENT 32C).

3





**Q. DURING PUBLIC TESTIMONY AT THE YORK COUNTY PUBLIC SERVICE COMMISSION NIGHT HEARING HELD ON MARCH 6, 2018, SEVERAL CUSTOMERS RAISED CONCERNS REGARDING BASE FACILITIES CHARGES ASSOCIATED WITH THEIR IRRIGATION METERS. DOES THE COMPANY PROPOSE ANY CHANGES TO ITS RATES AND CHARGES IN THIS CASE TO ADDRESS THESE CUSTOMERS' CONCERNS?**

**Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

5

1 **BY MR. TERRENI:**

2 **Q** Okay. I'd like to turn to your supplemental testimony  
3 now, dealing with the Tax Cut and Jobs Act.

4 **A** [CARTIN] Okay.

5 **Q** Now, as I understand it, ORS would like CWS – well,  
6 would like the Commission to order CWS to refund the  
7 revenue impact of the reduction in corporate income tax  
8 from 35 to 21 percent, from May 1st of this year. Does  
9 CWS agree?

10 **A** [CARTIN] They do not.

11 **Q** Why not?

12 **A** [CARTIN] We believe the refund is inappropriate because  
13 it's not taking into account the financial condition of  
14 our company did not trigger a refund. We were charging  
15 our customers rates approved by this Commission. We  
16 don't believe we should have to refund our revenues that  
17 we – were being billed in the regulation.

18 **Q** Is the company presently over-earning now that the Tax  
19 Cuts and Jobs Act has been put into place?

20 **A** [CARTIN] No.

21 **Q** Do you know what your allowed ROE was?

22 **A** [CARTIN] It was 9.34 percent in the last rate case.

23 **Q** And how much are you earning now?

24 **A** [CARTIN] Under 4 percent.

25 **Q** But wouldn't a refund benefit South Carolina – Carolina

1 Water Service's customers?

2 A [CARTIN] No, it would not.

3 Q Why not?

4 A [CARTIN] If the company is deprived of revenues in this  
5 case, and these are revenues that were ordered by this  
6 Commission, then it would accelerate our need to come  
7 back in for another rate increase.

8 Q In other words, you would be in the hole for however  
9 much that reduction is, coming out of the starting gate,  
10 right?

11 A [CARTIN] Correct.

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23 [PURSUANT TO PREVIOUS INSTRUCTION, THE PREFILED  
24 SUPPLEMENTAL TESTIMONY {W/AMENDMENT} OF MICHAEL R.  
25 CARTIN FOLLOWS AT PGS 323-325]



Change/amendment herein reflects action taken  
during the hearing held herein.

**THE PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA**

**DOCKET NO. 2017-292-WS**

In the Matter of

Application of Carolina Water Service,  
Inc. for an Adjustment of Rates and  
Charges and Modifications to Certain  
Terms and Conditions for the Provision of  
Water and Sewer Service

)  
)  
)  
)  
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)

**SURREBUTTAL TESTIMONY**

**OF**

**MICHAEL R. CARTIN**

1 **Q. ARE YOU THE SAME MICHAEL CARTIN THAT PREVIOUSLY FILED**  
2 **DIRECT AND REBUTTAL TESTIMONY IN THIS CASE?**

3 **A. Yes.**

4 **Q. HAVE YOU REVIEWED THE SURREBUTTAL TESTIMONY FILED BY ORS**  
5 **WITNESS SCHELLINGER?**

6 **A. Yes.**

7 **Q. DO YOU HAVE ANY CONCERNS WITH MR. SCHELLINGER'S TESTIMONY?**

8 **A. Yes.** I believe the proposed tax adjustment in Revised Surrebuttal Exhibit MPS-5 of Mr.  
9 Schellinger's testimony used to adjust revenues and rate base for the impact of the Jobs and Tax  
10 Reform Act of 2017 (Tax Act) from January 1, 2018 to May 10, 2018 (Estimated Revenue  
11 Adjustment Period) is inappropriate.

12 **Q. WHY IS IT INAPPROPRIATE TO MAKE THIS ADJUSTMENT?**

13 **A.** ORS' adjustment considers one effect of the Tax Act in a vacuum. The adjustment does  
14 not consider other costs and expenditures the Company has or will experience during the Estimated  
15 Revenue Adjustment Period. For example, increased purchased water and sewer expense due to  
16 rate increases from York County of approximately 25% and 29% for water and sewer respectively.

In addition, the adjustment is based on estimated revenues that are not fully known and measurable prior to the hearing date.

**Q. DOES ORS' ADJUSTMENT RAISE OTHER CONCERNS?**

A. Yes, the adjustment would result in impermissible retroactive ratemaking. ORS is essentially asking the Commission to refund previously approved rates. In *South Carolina Electric & Gas Co. v. Public Service Commission*, 275 S.C. 487 (1980) our Supreme Court held that a similar adjustment constituted impermissible retroactive ratemaking. In that case, the Commission had ordered SCE&G to refund more than seven million dollars to its customers because of lower than anticipated purchased power expenses. The Supreme Court reversed, holding that the Commission did not have the authority to order refunds. The Supreme Court held the Commission did not have the authority to order refunds except in certain narrowly prescribed circumstances. It explained that ratemaking is a prospective exercise, and the refund (which the Commission called an "extraordinary expense adjustment") amounted to impermissible retroactive ratemaking. The Supreme Court explained the logic of the rule of retroactive ratemaking:

The result reached here may initially appear unjust to the retail customer and unduly generous to SCE&G. This is not the case. The crux of this issue is the firm principle that rate-making is prospective rather than retroactive. The Commission has no more authority to require a refund of monies collected under a lawful rate than it would have to determine that the rate previously fixed and approved was unreasonably low, and that the customers would thus pay the difference to the utility.

275 S.C. at 491.

I have attached a copy of the Supreme Court's opinion as Surrebuttal Exhibit MRC-1.



**Q. WHAT IS THE EFFECT OF ORS' PROPOSED ADJUSTMENT ON THE COMPANY'S ABILITY TO EARN ITS ALLOWED RATE OF RETURN?**

**A.** The adjustment would not allow the Company the opportunity to earn its allowed return. The Company has proposed in testimony to set rates on test year revenues and expenses (as updated through the audit cut-off period), including all known and measurable impacts of the Tax Act. The Company would need to have been over-earning during this time to trigger a refund to our customers. ORS' own exhibits show the Company is not over-earning. ORS' financial exhibits show the Company was earning below a 4% ROE after its accounting and pro forma adjustments. According to Revised Audit Surrebuttal Exhibit ZJP-2, the Company's Net Income for Return on Rate Base "After Accounting & Pro Forma Present" adjustments is \$2,686,794 less Interest Expense of \$1,712,921 equals \$973,873. The Total Rate Base is \$54,110,690 per the exhibit. At the proposed capital structure of 51.89% equity to 48.11% debt, the resulting ROE earned is 3.47%.

**Q. WOULD ORS' PROPOSED ADJUSTMENT BENEFIT THE CUSTOMERS?**

**A.** No. Any benefit would be illusory. CWS has acknowledged that its customers should benefit from the new income tax reductions, and the Company went to great lengths to calculate and propose reasonable adjustments in this Application. ORS' adjustment, on the other hand, would not benefit ratepayers. By unjustifiably depriving the Company of revenue from previously approved rates, it will only accelerate the Company's need for future rate relief.

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

**A.** Yes, it does.

1                   **MR. TERRENI:** Mr. Cartin, those are all the  
2                   questions I have. Please answer any questions the  
3                   Commissioners may have, and the ORS.

4                   **MR. ELLIOTT:** If I may –

5                   **CHAIRMAN WHITFIELD:** Mr. Terreni –

6                   **MR. TERRENI:** Or do you want to – no, I'm  
7                   sorry.

8                   **CHAIRMAN WHITFIELD:** – I think we're going to  
9                   let Mr. Elliott –

10                  **MR. TERRENI:** I get – you know, I mess it all  
11                  up. Thank you.

12                  **CHAIRMAN WHITFIELD:** Mr. Elliott, if you'll  
13                  bear with me just one second.

14                  **MR. ELLIOTT:** Absolutely.

15                               [Brief pause]

16                  **CHAIRMAN WHITFIELD:** Mr. Elliott, we're going  
17                  to let you go ahead and present Mr. Gilroy at this  
18                  time, but we are – I don't know how long you plan  
19                  to go with him, but as soon as you're done, we are  
20                  going to break for lunch, and do cross-examination  
21                  and questions later.

22                  **MR. ELLIOTT:** Very fine, sir. For the record,  
23                  these panels confuse me, too, so –

24                               [Laughter]

25                               <

**DIRECT EXAMINATION****BY MR. ELLIOTT:**

**Q** All right, Mr. Gilroy. Would you please state and spell your name?

**A** [GILROY] My name is Bob Gilroy. G-i-l-r-o-y. I won't spell my first name, because that won't look good for everybody.

**Q** All right.

**A** [GILROY] But I'll go ahead and do it: B-o-b.

**Q** Yes, very fine. Please remind the Commission by whom you are employed and in what capacity.

**A** [GILROY] I'm employed by Carolina Water Service as Vice President of Operations.

**Q** And did you cause to be prepared and filed with this Commission 11 pages of direct testimony?

**A** [GILROY] Yes, I did.

**Q** Have you had a chance to review your testimony prior to your appearance this morning?

**A** [GILROY] Yes, I have.

**Q** Do you have – do you have a correction to your testimony, on page nine?

**A** [GILROY] [Indicating.]

**Q** I draw your attention to page nine – page nine, line 10, and you see the date there, October 2017?

**A** [GILROY] Yes. Where it states, I believe, where the

1 I-20 system was transferred to the Town of Lexington,  
2 and also the NPDES permit was not transferred on October  
3 2017, but was, in fact, transferred on February 1st, the  
4 day of the transfer.

5 **Q** All right. So the sentence would read, "on February 1,  
6 2018, SC DHEC transferred the NPDES permit..."

7 **A** [GILROY] That's correct.

8 **Q** Very fine. Do you have any other changes or corrections  
9 to your direct testimony?

10 **A** [GILROY] No, sir.

11 **Q** If I asked you those same questions now, as you  
12 corrected the one entry, would your answers be the same?

13 **A** [GILROY] Yes, sir.

14 **MR. ELLIOTT:** Mr. Chair, I'd move the direct  
15 testimony, as corrected, as if given orally from  
16 the stand.

17 **CHAIRMAN WHITFIELD:** Mr. Gilroy's direct  
18 testimony, as corrected, will be entered as if  
19 given orally from the stand.

20 **MR. ELLIOTT:** Thank you, sir. And if I may,  
21 just as we did with the previous witnesses, I'd  
22 like to go ahead and get all the testimony in, and,  
23 if it please the Commission, I would ask Mr. Gilroy  
24 if he caused to be prepared and prefiled with this  
25 Commission three pages of rebuttal testimony.

1                   **WITNESS GILROY:** Yes, I did.

2           **BY MR. ELLIOTT:**

3           **Q**     Do you have changes or corrections to that testimony?

4           **A**     [GILROY] No, sir.

5           **Q**     If I asked you those same questions today, would your  
6                   answers be the same?

7           **A**     [GILROY] Yes, sir.

8                   **MR. ELLIOTT:** Mr. Chair, I'd move the three  
9                   pages of rebuttal testimony into the record.

10                  **CHAIRMAN WHITFIELD:** Mr. Gilroy's three pages  
11                  of rebuttal testimony will be entered into the  
12                  record.

13                  **MR. ELLIOTT:** Thank you, sir.

14           **BY MR. ELLIOTT:**

15           **Q**     And last, Mr. Gilroy, did you cause to be prepared and  
16                   prefiled 10 pages of responsive testimony?

17           **A**     [GILROY] Yes, sir.

18           **Q**     And do you have two corrections to your responsive  
19                   testimony? And, particularly, I'll draw your attention  
20                   first to page four, line nine. There's a question at  
21                   line nine, "A couple of witnesses testified concerning  
22                   odors from life stations"?

23           **A**     [GILROY] Oh, yes. It should be lift, l-i-f-t, stations.

24           **Q**     Very fine. And drawing your attention, if I may, to  
25                   page six, line one, the line reading "interconnecting



1 with the closed CWS water distribution system," should  
2 that read "interconnecting with the closest"?

3 **A** [GILROY] Yes, "closest."

4 **MR. ELLIOTT:** C-l-o-s-e-s-t, Madam Court  
5 Reporter.

6 **BY MR. ELLIOTT:**

7 **Q** Do you have any other corrections or changes to your  
8 testimony?

9 **A** [GILROY] No, sir.

10 **Q** If I asked you these same questions today, would your  
11 answers be the same?

12 **A** [GILROY] Yes, sir.

13 **MR. ELLIOTT:** And finally, Mr. Chair, I'd move  
14 the responsive testimony to customer concerns into  
15 the record.

16 **CHAIRMAN WHITFIELD:** Mr. Gilroy's responsive  
17 testimony to customers' concerns will be entered  
18 into the record.

19 **BY MR. ELLIOTT:**

20 **Q** Mr. Gilroy, directing your attention to your direct  
21 testimony, just briefly describe the Carolina Water  
22 system in South Carolina.

23 **A** [GILROY] Well – hold on one second. I brought my 1.50s  
24 instead of my 2.00s [indicating]. On the system, CWS  
25 does have approximately 26,400 customers located within

1 16 counties, and the company operates 105 water systems  
2 and 28 sewer systems in those counties.

3 **Q** Thank you. Would you state the reason that Carolina  
4 Water has filed its Application to adjust its rates and  
5 charges in this docket?

6 **A** [GILROY] Yeah, the company's rates are not sufficient to  
7 cover the costs to serve the customers and provide a  
8 reasonable return to CWS on its invested capital. We do  
9 have a capital plan in place that supports CWS's  
10 Infrastructure Modernization Program, while also  
11 balancing potential rate impacts to customers of needed  
12 system improvements. And another important driver of  
13 the present cases is the recovery of increases in our  
14 purchased-water costs, as Michael outlined. These costs  
15 are bulk commodity costs that are passed through to  
16 customers. Unlike fuel commodity costs for electric  
17 utilities, water utilities do not have an annual  
18 adjustment mechanism to flow cost increases or decreases  
19 to customers on a regular basis. As a result, we're  
20 going to seek to recover those in this proceeding.

21 **Q** Very fine, thank you. Would you briefly describe some  
22 of the capital improvements made to the Carolina Water  
23 distribution system and sewer system since the last  
24 case?

25 **A** [GILROY] Yeah. Since the last case, we've invested

1 approximately \$14 million, just under \$14 million. And  
2 some of those projects – among some of the capital  
3 projects is the continuation of the hydrotank  
4 replacement program. These are to replace aging  
5 hydrotanks in order to safeguard our employees and the  
6 communities which they are located in. We've invested  
7 right about \$1.3 million in that project.

8 The Forty Love/Indian Fork Subdivision, since the  
9 last rate case, we have installed a ¾-mile-long drinking  
10 water interconnection to the City of Columbia and  
11 decommissioned and removed the water facilities that  
12 were there, which was well-water supply. So all those  
13 wells were abandoned properly to State standards and  
14 those facilities are 99 percent removed. We've got a  
15 couple of pipes yet to take out.

16 **Q** And at what cost?

17 **A** [GILROY] That was at a cost of just over a million,  
18 \$1,080,000.

19 **Q** Thank you. Please continue.

20 **A** [GILROY] The Friarsgate EQ liner remediation that  
21 Michael talked about, we removed the existing 1.1-  
22 million-gallon equalization basin high-density  
23 polyethylene liner, and then investigated and addressed  
24 any soil contamination that may have existed underneath  
25 that liner. While doing that, we installed a 1.6-

1 million-gallon temporary EQ tank, aboveground EQ tank.

2 This was all done at a cost of right at \$1,081,000.

3 **Q** Please continue. How about the Friarsgate collection  
4 system?

5 **A** [GILROY] In the Friarsgate collection system, which is  
6 ongoing, we have undertaken an inflow-and-infiltration,  
7 or I&I survey and remediation audit and work, to address  
8 the aging clay sewer mains infrastructure, mostly in the  
9 new Friarsgate Subdivision. That project cost is  
10 \$591,000.

11 Also, on that same note, Pocalla inflow-and-  
12 infiltration reduction, this is, again, to address aging  
13 infrastructure, mainly clay gravity mains. We did a lot  
14 of relining work there, or cured-in-place piping, CIPP.  
15 Most of that work was required following the October  
16 2015 flooding, the thousand-year flooding, when the  
17 system became surcharged and had way more water than it  
18 could handle through flooding. That project was about  
19 \$335,000.

20 The River Hills Lift Station No. 8 was a project  
21 where we decommissioned an old, what we call, a dry can  
22 or dry pit lift station. Normally, those, you have a  
23 deep wet well and then you have a deep dry well that an  
24 employee has to enter, and it may be anywhere from eight  
25 feet deep to 22 feet deep, but they're very deep. It's

1 subterranean. They have to go down there to do any  
2 service work. This is a much older lift station, and  
3 for a safety factor and also so no interruptions in  
4 service or impacts to the environment, we actually  
5 decommissioned that lift station and built a new  
6 modernized duplex submersible lift station.

7 **Q** How about Peachtree Acres?

8 **A** [GILROY] Peachtree Acres is right near – it's not part  
9 of I-20; it's just on the other side of Highway 1. In  
10 that case, it's served by two wells, one on either side  
11 of the entrance, and a hydrotank for water pressure,  
12 whatever, but we dis- – that's another case where we  
13 decommissioned the supply wells and went to purchased  
14 water with West Columbia, so we put an interconnection  
15 in there. That was done for \$118,000.

16 Washington Heights was another interconnection. We  
17 heard the customers there, from the last rate case,  
18 complaining about the discolored water and pressure  
19 problems and whatnot. In that case, we went ahead and  
20 interconnected with the City of Columbia for a  
21 supplemental water system, and what that allowed is, we  
22 had wells there that provided water but there was – the  
23 water storage was limited and the positioning of the  
24 wells, so we couldn't get a really good, efficient  
25 flushing done that we do twice a year on the well



1 system. And there was also concerns about the fire  
2 hydrants within the subdivision that were not rated for  
3 fire flow. So we put an interconnection in which  
4 actually allows for fire flow for those hydrants. We  
5 notified the City of Columbia that they are rated for  
6 fire flow now, and we also flushed that system pretty  
7 hard, which resulted in eliminating those dirty water  
8 calls.

9 **Q** Thank you. Could you describe briefly the effect that  
10 some of these capital improvements, that you've made to  
11 the system, has on operations and service?

12 **A** [GILROY] Yeah. Simply, it's made operations for our  
13 employees and the communities that we serve safer, and  
14 it's also worked to decrease, as much as possible, any  
15 type of service outages or disruptions.

16 We also go to the hydrotank program where we're  
17 replacing the hydrotanks. That's been going on for a  
18 few years right now. The hydrotanks, in South Carolina  
19 there is no regulatory directives or whatever that  
20 actually oversee those, so there was a fairly large  
21 fleet within South Carolina – not just Carolina Water  
22 Service – of hydrotanks that were built some time ago  
23 and were not board-certified by ASME Code. So those,  
24 the ones we identified, we removed them from service.  
25 The other ones, we hired engineers to go out and measure

1 thicknesses on the steel jackets and linings, and that  
2 will provide for a safer community and a safer  
3 workplace, as well as less service interruptions.

4 **Q** Other benefits?

5 **A** [GILROY] Water quality and pressure concerns on the  
6 system. Many systems were built in rural areas to  
7 address public water needs where no municipal systems  
8 were located. Yeah, in this case, as a perfect example,  
9 with the – let me see if I've got the right base. The  
10 Forty Love Subdivision – actually, it's Forty  
11 Love/Indian Fork – they are an interconnected  
12 distribution system, and for many years after that  
13 system was built, there were no municipalities or other  
14 water systems in the area. So, actually, putting a  
15 multiple well system in there, the developers doing  
16 that, they were able to actually develop that area on  
17 Lake Murray. It's a beautiful area. The problem is  
18 that over the years that it's been there, the well  
19 system couldn't keep up with the demand, and also the  
20 water quality – as with any well system, you have a lot  
21 of mineral content, and then there are other problems  
22 during drought or whatever where you have lowered water  
23 pressure. You may have some problems with wells over  
24 time that affect the pressure or service to the  
25 customers. And in this case, the interconnection

1 basically is how we permanently resolved that problem.

2 **Q** Good. How about pipe replacement, benefits to the  
3 customers for pipe replacement? Why do you have a  
4 program, an I&I Program?

5 **A** [GILROY] Yeah, in an I&I Program – I&I occurs primarily  
6 in aged clay pipe, not so much the newer subdivisions  
7 that have PVC – mostly all PVC piping. But the older  
8 subdivisions that do use clay for gravity mains, mostly,  
9 I&I occurs primarily mostly in those as a result of  
10 cracks and separations, root intrusion, improper tapping  
11 by the builders, plumbers. When they run a line there,  
12 they just knock a hole in the line and put a bag of  
13 cement around it. Well, that might be fine – and we're  
14 not aware of when they do that, by the way. We usually  
15 discover that after the fact, when there's a problem,  
16 when roots or something get inside that – you know,  
17 between the pipe and the concrete.

18 And then there's unauthorized tapping of mains for  
19 storm water runoff and gutters and those type of things  
20 that allow a lot of water to flow into a collection  
21 system, affecting the treatment. Where necessary,  
22 broken sewer lines and damaged manholes are repaired and  
23 replaced. Digging up and replacing thousands of feet of  
24 old clay main may not always be the best or most cost-  
25 effective alternative, but the one thing that we can do

1 with more modern technology is to do what I referred to  
2 before, is the cured-in-place piping, or CIPP, where we  
3 can actually go in and insert a lining into a pipe and  
4 then cure it in place, and it's actually much harder  
5 than the clay, with new life on it. That allows us not  
6 to have to dig up people's yards or roads or, you know,  
7 take down fences, those type of things.

8 **Q** Very good. Thank you for that. Let me draw your  
9 attention to future projects, future capital projects.  
10 I think we anticipate, the company anticipates,  
11 additional projects. Would you briefly describe what is  
12 on the drawing board, so to say?

13 **A** [GILROY] Yeah. Currently, the Stonegate Subdivision –  
14 that's a well-water system, and we've gotten a fair  
15 share of discolored water complaints from that system,  
16 and it's served by three wells, a couple of which have  
17 very high iron and manganese content. And we have  
18 filter systems in place, but there are times when the  
19 water does get discolored or some of it makes it by. So  
20 in this case, we're actually going to shut down the  
21 wells and we're going to interconnect with the City of  
22 Columbia, and that's in progress now.

23 **Q** Good. What do you foresee at Friarsgate, with respect  
24 to relining clay sewer mains?

25 **A** [GILROY] Yeah, we have an ongoing – it's actually an

1 ongoing audit of the collection system, actually through  
2 a consent order with DHEC. So, in that case, we're  
3 actually auditing – which means washing and cameraing  
4 every sewer pipe or gravity main within the system – and  
5 then once we have them prioritized, or – yeah –  
6 prioritized for servicing or for corrections, we'll go  
7 ahead and make those over the next few years.

8 **Q** Good. Hunters Glen?

9 **A** [GILROY] Hunters Glen, we have two wells in Hunters  
10 Glen: a large well and a smaller well. They're both  
11 sand wells; it's sand country down there. Anyway, we  
12 have one well where the screening is very bad, so  
13 instead of going in – it's a four-inch well. Instead of  
14 going in – we've had it treated several times now, but  
15 the decision has been made to go ahead and abandon that  
16 well once we put a new well in. We'll put a larger-  
17 diameter eight-inch well drilled in that vicinity. So  
18 it's not a water quality problem, it's just an  
19 infrastructure problem.

20 **Q** Very fine. How about Sherwood Forest in the upper part  
21 of the State?

22 **A** [GILROY] Sherwood Forest is going to be another  
23 interconnect for purchased water. And in that case, I  
24 think that's in progress right now. We just borrow the  
25 land for the interconnect and shut down the well that's



1       there.

2       **Q**     Do you anticipate future work in River Hills?

3       **A**     [GILROY] Yes. There's a rehabilitation of seven lift  
4       stations coming up in our capital plan. River Hills, I  
5       think there's a total of 60 there, and some are newer  
6       than others and they've been around for a while, so we  
7       are – we have basically surveyed those assets and  
8       determined in a prioritized way which ones we're going  
9       to have to upgrade.

10      **Q**     And how about, last, Oakland?

11      **A**     [GILROY] Oakland Plantation is a wastewater treatment  
12      plant in Sumter, and it is an older plant – again, aging  
13      infrastructure. The clarifier is made of steel; it's  
14      basically inground and it's made of steel, so it's very  
15      hard to evaluate the steel in there. We know it does  
16      have significant corrosion, so we're going to go ahead  
17      and replace that clarifier.

18      **Q**     Thank you. I think we've discussed the I-20 system, so  
19      let me ask you now, if I may, Mr. Gilroy, what is the  
20      status of the Friarsgate wastewater treatment plant and  
21      its NPDES permit?

22      **A**     [GILROY] In that one, the NPDES permit labels Friarsgate  
23      as a temporary plant, and it also has a compliance  
24      schedule in there that when DHEC notifies us that there  
25      is capacity with a regional provider – and I think in

the permit it says the City of Columbia. Through the COG, there's actually two regional providers; one would be the City of Columbia and the other one would be Richland County Utilities. So we've had discussions with both, as far as a wholesale agreement, a proposal for a wholesale agreement. The City of Columbia has – we have a letter of intent from them, and we expect to carry through with interconnecting with the City of Columbia.

**Q** Very fine. But until that happens, Carolina Water still must operate the Friarsgate –

**A** [GILROY] It still operates the Friarsgate plant. And, in fact, we've contracted with a contract operations firm, ClearWater Solutions, so we no longer have employees at that plant. We reduced the O&M, or the cost of operating that plant, by going to a contract operator who now oversees its operations.

**Q** And what work have you done at Friarsgate most recently?

**A** [GILROY] That would be the EQ.

**Q** Yes, would you explain the work you've done, so far, to the EQ liner?

**A** [GILROY] Oh, okay. I thought we'd gone over that before, but the EQ liner – the EQ basin or liner is in an inground basin. There's different type of the EQs, of course; there's aboveground steel tanks or concrete

1 tanks, or whatever, and this one is a 1.1-million-gallon  
2 inground, so it's almost like a swimming pool, per se,  
3 or a pond, and it has a black HDPE liner that it's in,  
4 and it's in a clay basin – compacted clay basin. In  
5 this case, over time, there have been what we call wales  
6 or bubbles that came up in it, and also there were small  
7 cracks in it, so that's why, in the consent order, as  
8 part of the corrective action, was to replace the liner  
9 and investigate and take care of any remediation of the  
10 soils underneath. And we've done that and that was  
11 under supervision and working along with DHEC in that  
12 matter.

13 **Q** Any electronics need to be replaced at Friarsgate?

14 **A** [GILROY] Oh, yeah. As far as that goes, we've replaced,  
15 in the pump stations there, of course, everything from  
16 basin to basin, you have a lot of pumps there that go  
17 back and forth. We've replaced a lot of the pumps and  
18 we've also upgraded those lift stations, they call them.  
19 It's not at the subdivision but it's on the plant  
20 property, the wastewater treatment plant pump stations.  
21 We've replaced basically the on-and-off load switch type  
22 – the older mechanisms – with newer, variable speed  
23 drives so that it actually senses the flow rates and  
24 increases the pumping rate or slows it down according to  
25 those flow rates.

1           We've also replaced or relined a lot of the basins  
2           in that plant, as well. And there's also – part of any  
3           wastewater treatment plant is the air rates, so we have  
4           three large – we had three large turbine blowers, you  
5           might call them, 75 horsepower blowers that we replaced,  
6           in this case.

7                   MR. ELLIOTT: Good. Thank you.

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23 [PURSUANT TO PREVIOUS INSTRUCTION, THE  
24 PREFILED DIRECT TESTIMONY {W/CORR'N} OF  
25 BOB GILROY FOLLOWS AT PGS 344-354]





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A. The purpose of my testimony is to (1) provide an overview of the Company's system, (2) explain the drivers of the present rate increase request, (3) describe the capital and operational improvements made by the Company during the test year, and (4) share CWS's plans for future investments and improvements to benefit customers.

A. CWS has approximately 26,400 customers in 16 counties: Lexington, Richland, Sumter, Aiken, Saluda, Orangeburg, Beaufort, Georgetown, Abbeville, Union, Anderson, York, Cherokee, Greenville, Greenwood, and Williamsburg. As a result of the merger with Southland Utilities, Inc., Utilities Services of South Carolina, Inc., and United Utility Companies, Inc. in 2015, the Company

operates 105 water systems and 28 sewer systems. CWS has 105 drinking water permits, 19 NPDES permits and 9 satellite sewer system permits to support the operations of these systems.

**Q. WHY HAS THE COMPANY FILED AN APPLICATION TO ADJUST ITS RATES AND CHARGES AND MODIFY CERTAIN TERMS AND CONDITIONS OF SERVICE?**

**A.** Simply stated, the Company's rates are not sufficient to cover the costs to serve customers and provide a reasonable return to the Company on its invested capital. Our commitment to customers to provide safe, reliable water and sewer service requires that we make the investments necessary to modernize our systems and comply with local, state and federal laws and regulations. Like other public infrastructure (roads, electric grid, etc.), water and wastewater utilities across the country are faced with repairing and replacing aging facilities that are many years beyond their intended design life. We have a capital plan in place that supports CWS's infrastructure modernization program while also balancing potential rate impacts to customers of needed system improvements. Another important driver of the present case is the recovery of increases in the Company's purchased water costs. These costs are bulk commodity costs that are passed through to customers. Unlike fuel commodity costs for electric utilities, water utilities do not have an annual adjustment mechanism to flow cost increases or decreases to customers on a regular basis. As a result, we are also seeking to recover those costs in this case.

**Q. IS CWS ASKING TO CHANGE ANY PROVISIONS IN ITS WATER AND SEWER TARIFFS OTHER THAN THE MONTHLY CHARGES FOR SEWER SERVICE, AND THE BASE FACILITIES AND COMMODITIES CHARGES FOR WATER SERVICE?**

**A.** Yes, CWS is requesting several changes to its terms and conditions. The Company seeks to amend its Cross-Connections Inspection conditions to require residential customers to test their back-flow devices every two years (as opposed to every year as currently required), and to authorize the Company to terminate service to any customer who, after notice, fails to demonstrate



1 that its back-flow device is operating properly. A two-year requirement reduces the burden on our  
2 customers and should adequately protect the utility. The Company also seeks authority to  
3 increase its Water Meter Installation charge from \$35 to \$45 to more closely reflect the utility's  
4 costs.

5 Q. PLEASE DESCRIBE SOME OF THE CAPITAL IMPROVEMENTS MADE TO  
6 CWS'S WATER DISTRIBUTION SYSTEM AND SEWER SYSTEM SINCE THE LAST  
7 RATE CASE.

8     **A.**     Since its last rate case, the Company has made investments to utility plant in service of  
9     \$13,942,366 including, but not limited to:

- Hydro tank replacement program: the Company is working to replace varying sizes of aging hydro tanks in order to safeguard employees and the communities we serve. Since the last rate proceeding, tank replacements completed to date total \$1,311,284,
- Forty Love/Indian Fork: CWS has installed a 3/4' mile drinking water interconnection to the City of Columbia to convert the system to a purchased surface water supply from a well supply system to resolve water quality and pressure issues within the distribution system. Decommissioned and removed well water facilities. The project cost totaled \$1,080,237,
- Friarsgate WWTP EQ liner remediation: the Company has removed the existing in-ground 1.1 million gallon equalization basin high density polyethylene liner, investigated and addressed contaminated soils underneath the liner and prepped the basin for installation of a new liner. A 1.6 million-gallon temporary EQ tank was installed while work has been conducted. The remediation phase of this project totaled \$1,081,375,
- Friarsgate collection system: CWS has undertaken an inflow and infiltration (I&I) survey and remediation work to address aging clay sewer main infrastructure. The purpose of this project was to ensure continuity of customer sewer service and avoid potential environmental impact from aged sewer mains issues such as root intrusion, leaks, and clogs. The project cost totaled \$591,613,
- Friarsgate WWTP: CWS purchased and installed three 75 horsepower blowers to replace existing blowers that were reaching end of life. These blowers provide aeration that is critical for the treatment process of the wastewater and to control odors. The project cost totaled \$206,031,
- Pocalla Inflow and Infiltration reduction and system improvements: the Company relined clay sewer collection mains utilizing cured in place piping (CIPP) due to high

infiltration rates following the historic flooding of October 2015, which resulted in sections of mains being damaged by excessive surcharging of the system. The project cost totaled \$335,066,

- River Hills Lift Station #8: CWS decommissioned and removed an existing dry can sewer lift station due to the facility's age and safety concerns to employees and built a new duplex submersible lift station in a new location to satisfy county zoning ordinances. The project cost totaled \$195,295,
- Peachtree Acres interconnection with the City of West Columbia: The project cost totaled \$118,584,
- Washington Heights interconnect: the Company installed an interconnection with the City of Columbia to supplement the existing well water supply system for enhanced flushing of the system and to provide fire flow to the existing fire hydrants. The project cost totaled \$61,167, and
- Other maintenance and capital improvement program: the Company replaced or relocated sewer mains, water mains, sewer laterals, well pumps/motors, water meters, water service lines, valves, control panels, manhole rehabilitation/ replacement, sewer pumps.

**Q. WHAT EFFECT HAVE THE CAPITAL IMPROVEMENTS MADE TO THE COMPANY'S WATER AND WASTEWATER SYSTEM SINCE THE LAST RATE CASE HAD ON ITS OPERATIONS AND SERVICE?**

A. The investments we have made have increased the safety and reliability of our system for the benefit of customers. For example, the hydro tank replacement program has improved the safety and reliability of our water service to customers. Nationally, hydro tanks are rapidly coming to the end of their useful lives, and CWS has been proactive in inspecting and replacing its hydro tanks. The Company has had a testing program for these tanks in place for a number of years. However, the Company has recently accelerated its inspection and replacement program. Newer tanks are designed and built to a more rigid code as required by the American Society of Mechanical Engineers and are more reliable than the tanks they replaced. Because they are less likely to rupture, our water system is more reliable and our service personnel and the communities we serve are less likely to experience a service interruption.



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1 to have a useful life of 50 years.

2 The Company has also made reliability and safety improvements to improve flushing  
3 capability on its systems. The Washington Heights water system was developed and set up in a  
4 way that prohibited effective and efficient flushing of the lines bi-annually as desired, which led  
5 to occasional periods of discolored water entering homes. The well pressure and volume of water  
6 was adequate for the normal operation, but not for a complete efficient flushing of the system.  
7 The Company installed a supplemental interconnection with the City of Columbia to improve the  
8 flushing capabilities of the system while providing fire flow to the existing fire hydrants and  
9 serving as an emergency water supply when needed.

10 In Riverhills, we improved service reliability by upgrading a substantial sewer pump  
11 station. The pump station was constructed with a dry well adjacent to the wet well. The confined  
12 space of the dry well presented risks to our personnel and contractors. Although the wet well held  
13 the sewer water, the pumps had been installed in the dry well. Our service personnel had to enter  
14 the dry well to perform frequent checks or servicing. Service contractors also had to enter the  
15 subterranean space to service or repair the pumps as required. We determined that improved  
16 service reliability and employee/contractor safety justified converting the aged dry well pump  
17 station into a duplex submersible sewer pump station and filling in and properly abandoning the  
18 dry well work space. The new pumps are more efficient, cost-effective and our service personnel  
19 are not put at risk during service calls. In order to complete this project, the York County Zoning  
20 Board required us to move the lift station to an area not visible to residences as required by their  
21 zoning ordinance. Finally, CWS has also acted to replace water and sewer main sections, gravity  
22 lines, pumps, meters and manholes, all of which act to improve system reliability.

23 **Q. DO YOU ANTICIPATE THE NEED FOR ADDITIONAL SUBSTANTIAL CAPITAL**  
24 **IMPROVEMENTS IN THE NEAR FUTURE?**

A. Yes, I would note the following:

- Interconnect Stonegate water system with City of Columbia:

CWS plans are to convert the Stonegate water supply from well sources to purchased surface water from the City of Columbia. This will resolve the customer concerns regarding water quality due to high mineral content which periodically results in instances of discolored water from iron and manganese content,

- Friarsgate relining clay sewer mains:

CWS has an ongoing effort to address aging sewer collection system infrastructure. Within the Friarsgate collection system, CWS is addressing the replacement and relining of thousands of feet of aged clay sewer mains and hundreds of aged concrete and brick manholes. This is being conducted to reduce I & I within the system resulting in high flows negatively impacting the treatment plant and environmental impact of high flows. This also decreases the potential for sewer clogs and backups impacting customer service and the environment,

- Drill new well to replace aging well with reduced production: in Hunter's Glen:

Of the two existing well sources supplying potable water to the Hunter's Glen water customers, one is decreasing in production and rehabilitation efforts have been exhausted. The new well will provide a continuity of service and the system will also remain compliant with capacity requirements,

- Interconnect Sherwood Forest water system with Sandy Springs Water District:

This well source distribution system is provided water by a single well source. If the well source is interrupted or fails entirely, there will be a disruption in service to the customers which could be prolonged. Converting the distribution system to a purchased water system will avoid this possibility,

- Rehabilitation of seven sewer pump stations in River Hills:

This an effort to address aging infrastructure. The multiple pump stations to be addressed are obsolete in design. The rehabilitation and upgrading of these facilities will provide a continuity in service to customers and avoid the potential for impacts to the environment should they fail.

- River Hills relining clay sewer mains:

CWS has an ongoing effort address aging sewer collection system infrastructure. Within the River Hills collection system in coming years, CWS will replace and reline thousands of feet of aged clay sewer mains and hundreds of aged concrete and brick manholes. This will be done to reduce I & I within the system and high flows and could negatively impact the treatment plant. This work will also decrease the potential for sewer clogs and backups impacting customer service and the environment.



- This project will replace a component within the treatment system which is nearing end of life. The inground steel clarifier suffers from corrosion and its replacement will ensure continuity of service to the Oakland Plantation customers as well as avoid potential environmental impacts should the component fail.

A. On February 1, 2018, the Town of Lexington assumed ownership and operational control, including billing to the approximately 2000 sewer customers, of the Company's former I-20 wastewater treatment facility pursuant to a condemnation action filed by the Town against CWS. On February 1, 2018, ~~In October 2017,~~ SC DHEC transferred the NPDES Permit for the plant to the Town, also effective February 1, 2018. The transfer price of the system remains the subject of the pending condemnation action and will be determined by a jury.

A. The Friarsgate WWTP continues to operate pursuant to its NPDES permit, dated January 6, 2000. In accordance with the Central Midlands Regional 208 Water Quality Plan, the Friarsgate WWTP is considered a temporary treatment facility. In November 2017, CWS was notified that the City of Columbia's regional sewage system had achieved the capacity needed to accept the wastewater from Friarsgate. In addition to the City of Columbia, Richland County is also a qualifying regional provider under the 208 Plan. Since November 2017, the Company has held several meetings with the City of Columbia and Richland County to discuss interconnecting Friarsgate with their systems. Interconnection proposals from both the City and the County are expected to be received by CWS by March 1, 2018.

**A.** The Friarsgate WWTP has been in operation since the 1970s and has maintained substantial

1 compliance with its permit limitations throughout this period. In the last several years, the facility  
2 has experienced several plant upsets due to the age of the facility and obsolescence of some plant  
3 components. Specifically, in June 2016, the plant experienced an upset because of turbid effluent  
4 that interfered with the ultra violet disinfection used by the plant to kill bacteria in the effluent  
5 before it is discharged into the receiving waters of the Saluda River. The result was excessive fecal  
6 levels above the permit limits. A “no swim” advisory was posted for the Saluda Shoals area of  
7 the Saluda River until the work to address the issue was completed.

8 **Q. WHAT UPGRADES HAS CWS MADE TO THE FRIARSGATE WWTP?**

9 **A.** The Company has made numerous improvements to the Friarsgate WWTP over the years,  
10 including replacing gas chorine with ultra violet for disinfection, replacing aging electrical circuit  
11 breakers and control panel components, and adding treatment basins to serve an increasing  
12 population with increasing flow levels. New effluent force main turbine pumps were added within  
13 recent years to replace the original older pumps for reliability and to increase pumping capacity.  
14 Much of the plant, including the concrete effluent basins, were original components with  
15 significant wear. After the June 2016 plant upset, we mitigated the bacteria exceedances through  
16 treatment processes and also addressed the multiple effluent basin components by relining or  
17 constructing new basins and flow controls. CWS installed modern control panels with newer  
18 variable speed technology for existing pumps to control treatment plant flows. Additionally, new  
19 piping with more modern air diffusers were installed throughout the plant for delivery of enhanced  
20 dissolved oxygen for treatment.

21 **Q. WHAT STEPS IS CWS TAKING TO PREPARE FOR THE INTERCONNECTION**  
22 **OF FRIARSGATE WWTP TO A REGIONAL PROVIDER?**

23 **A.** The company is aggressively pursuing discussions with the City of Columbia and Richland  
24 County. After receiving proposals from the City and the County, the company will select a provider

1 and begin negotiations on the terms of an interconnection agreement. In preparation for the  
2 interconnection and to facilitate an expeditious transition to an interconnected system, CWS  
3 recently hired Clearwater Solutions to operate the Friarsgate WWTP.

4 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

5 **A.** Yes, it does.

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1 **BY MR. ELLIOTT:**

2 **Q** Let me draw your attention now, if I may, to your  
3 rebuttal testimony. The ORS recommends that Carolina  
4 Water's request to require residential customers to test  
5 backflow devices every two years be limited only to  
6 customers with irrigation cross-connections. How does  
7 Carolina Water respond?

8 **A** [GILROY] We agree with that, to test irrigation systems  
9 just on a two-year basis, with the only exception being  
10 irrigation systems that actually use a chemical or  
11 fertilizer injection. That would remain annually.

12 **Q** Good. Thank you. Now, next, I'd like you to address  
13 the concerns raised by Forty Love Point customers Ms.  
14 King and Mr. Dixon in this docket.

15 **A** [GILROY] The Forty Love sewer system is a LETTS design  
16 installed by the developer. LETTS systems are  
17 essentially modified septic tanks in which solid waste  
18 accumulates in a holding tank, with the gray water  
19 draining to a common sewer main for transport to the  
20 treatment provider, which is Richland County Utilities  
21 at this time. So, essentially, it's a septic tank, but  
22 instead of having a leach field there's actually a pipe  
23 that leaves that goes to our main, to go for treatment,  
24 instead of percolating into the ground.

25 The company has been working with the Kings and

1       Dixons to determine why their LETTS tank failed to drain  
2       during prolonged rain events or especially hard rain  
3       events, and we believe the elevation and distance  
4       between their finished basements and the sewer main  
5       outside provides for not much leeway when the sewer main  
6       backs up even slightly. And we currently have a  
7       contractor working with both the Kings, the Dixons, and  
8       another gentleman in the subdivision, to address that.  
9       And the one way we're going to address it is actually  
10      install a pump tank. If you know houses that are below  
11      grade or below elevation and they have to get to a  
12      system that's above their house, generally, the house  
13      will drain to a pump tank, and then that pump will pump  
14      up to the gravity system and dump into it there. So in  
15      this case, with theirs, because they're at a very low  
16      elevation and they're very close to that main – in some  
17      cases, there's only the distance of the tank between the  
18      house and the main; they have finished basements, so  
19      there is plumbing at even lower elevation – we're going  
20      to go ahead and put, at our expense, put a pump station  
21      there. So they'll still have the tank, but instead of  
22      that gray water going into our main, it will fall into  
23      the pump station and then the pump station actually,  
24      when it fills up, will pump into that main. And that  
25      will give them separation and no chance of a backup at

1       their houses; their houses will drain properly.

2       **Q**   All right. Would you respond to the ORS proposal to  
3       adjust operation and maintenance expense for sludge  
4       holding at the Friarsgate treatment facility?

5               **CHAIRMAN WHITFIELD:** Mr. Elliott, do you have  
6       a good bit longer with Mr. Gilroy?

7               **MR. ELLIOTT:** Well, I can finish this rebuttal  
8       here in just a couple of minutes and we could come  
9       back into the responsive testimony, but we have yet  
10      the responsive testimony yet to go. Would you like  
11      to break here? We can break now at this question,  
12      but I have one more Q-and-A in the rebuttal  
13      testimony.

14              **CHAIRMAN WHITFIELD:** Just a couple of minutes  
15      in the rebuttal?

16              **MR. ELLIOTT:** Yes.

17              **CHAIRMAN WHITFIELD:** Let's do that, if it's  
18      just a couple of minutes.

19              **MR. ELLIOTT:** I believe it's just a couple of  
20      minutes.

21              **CHAIRMAN WHITFIELD:** All right.

22              **MR. ELLIOTT:** I think the question just calls  
23      for a couple of minutes of an answer.

24              **CHAIRMAN WHITFIELD:** Okay.

25              **MR. ELLIOTT:** Let's just let me make my point.

[Laughter]

**BY MR. ELLIOTT:**

**Q** All right, so, just to repeat, Mr. Gilroy, and then after this question, we'll stop. Would you please respond to the ORS proposal to adjust operation and maintenance for the sludge hauling at the Friarsgate facility.

**A** [GILROY] Yeah. ORS has proposed to remove that little over \$96,000 in sludge hauling costs associated with the operation of the Friarsgate plant. Rather than allow CWS recovery of its known and measurable sludge-hauling cost – and I say known and measurable because the plant produces a certain amount of sludge, and we have to dispose of that same sludge. There's nothing else that we can do with it. So it does get transported out, and it is a known quantity. So the ORS proposed an adjustment to allow CWS recovery of only a three-year average of the annual sludge-hauling cost of the Friarsgate treatment plant. We oppose ORS's proposed adjustment because the sludge-hauling expenses are known and measurable and were prudently incurred. In addition, ORS's adjustment is contrary to the Commission precedent.

The Friarsgate treatment plant produces large amounts of sludge that must be disposed of in a timely

1 manner. The amount of sludge produced is dependent on  
2 many factors within the process of the wastewater  
3 treatment plant. So it's dependent on – you keep a  
4 certain inventory in the plant for the biological  
5 process, and when that starts to get too much, you  
6 actually waste off liquid or sludge. And in this case,  
7 that's dependent on temperatures, ambient temperatures.  
8 In the wintertime, there may be less. If it's an  
9 extremely hot summer – last summer, it wasn't a  
10 relatively really, really hot summer. The summer before  
11 that was; we were in triple digits. Last year, we  
12 barely got into the 90s. So this biological process,  
13 when you have a lot of heat or hotter days, it produces  
14 more sludge and you have to get rid of it. Also, if you  
15 have a lot of rainfall, you get more flow; it produces  
16 more sludge. So there's different factors that work  
17 there on how much it produces. So everything that it  
18 does produce – it may be less one year, more the next  
19 year, different times or whatever – but all the sludge  
20 that a plant produces is wasted off and disposed of.

21 One of the things that we have to do is keep that  
22 sludge that's in the plant, that works for the  
23 biological process, at an inventory that's low enough –  
24 you get into mixed liquors and settleable solids and  
25 those kinds of things – is about 2500 milligrams per



liter. If you start getting above that, you get closer to, if there is a heavy rainfall, an upset can occur and you can lose those solids out the effluent, instead of wasting them off properly. So you have to waste at a certain rate and sometimes accelerated rates, to keep that inventory in that plant at that lower level.

MR. ELLIOTT: Very fine. That concludes his rebuttal testimony, Mr. Chair, if you would like to break at this time?

CHAIRMAN WHITFIELD: All right. Yes, Mr. Elliott. We will break now for lunch and we will resume back at 1:45.

[WHEREUPON, a lunch recess was taken from  
12:27 to 1:55 p.m.]

A F T E R N O O N   P R O C E E D I N G S

**CHAIRMAN WHITFIELD:** Please be seated. I'll call this hearing back to order, and, Mr. Elliott, we will resume back with you.

**MR. ELLIOTT:** Thank you, sir. Mr. Chairman, after conversation with Mr. Butler at the break, I explained to Mr. Butler that, having canvassed all the counsel and parties, I would like to have Mr. Gilroy address an, apparently, short matter in his rebuttal testimony. I indicated we were through, but I will tell the Commission, in consideration of that request, we anticipate shortening his summary of his responsive testimony. I do think – there were two things, Mr. Butler, when you and I last talked, and there's a third short thing that I'm going to add, thanks to the good offices of the ORS Staff, but I'll be brief.

**BY MR. ELLIOTT:**

**Q** All right. Mr. Gilroy, let me draw your attention, please, to your rebuttal testimony?

**A** [GILROY] Yes, sir.

**Q** And, in particular, page two, line two, of your rebuttal testimony?

**A** [GILROY] Yes, sir.

**Q** And I want to ask you if you would summarize please,

1 from your rebuttal, the understanding that Carolina  
2 Water Service has with the Forty Love Homeowners'  
3 Association with respect to their LETTS systems.

4 **A** [GILROY] Okay. Yeah, with respect to the LETTS systems,  
5 we are retaining a professional engineering firm to  
6 inspect the entire system and help us solve the sewerage  
7 backup problems experienced by these customers. We will  
8 continue to communicate with the Forty Love Homeowners'  
9 Association as we move through the engineering  
10 assessment with the outside contractor. CWS – we will  
11 also – and the HOA have agreed to report their findings  
12 to the Commission and to ORS in six months, by September  
13 30, 2019. While it is working towards a permanent  
14 procedure, CWS will continue to alleviate the problem by  
15 dispatching pump trucks to the neighborhood when heavy  
16 rains are anticipated. We are also inspecting each of  
17 the LETTS tanks and will reseal them, as necessary.  
18 Reduced water for the tank should ease the stress placed  
19 on the system.

20 **MR. ELLIOTT:** Very fine. Thank you so much.

21  
22  
23 [PURSUANT TO PREVIOUS INSTRUCTION, THE  
24 PREFILED REBUTTAL TESTIMONY OF BOB  
25 GILROY FOLLOWS AT PGS 363-365]

**THE PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA**

**DOCKET NO. 2017-292WS**

IN RE: Application of Carolina Water, Inc.)  
for Adjustment of Rates and )  
Charges and Modifications to Certain )  
Terms and Conditions for the Provision )  
of Water and Sewer Service )

**REBUTTAL TESTIMONY  
OF  
BOB GILROY**

**Q. THE ORS RECOMMENDS THAT CWS' REQUEST TO REQUIRE RESIDENTIAL CUSTOMERS TO TEST BACK FLOW DEVICES EVERY TWO YEARS BE LIMITED ONLY TO CUSTOMERS WITH IRRIGATION CROSS CONNECTIONS. HOW DO YOU RESPOND? (SHELLINGER PAGE 11, LINE 1).**

**A.** CWS agrees to limiting the testing requirement to every two years for those residential customers with irrigation cross connections unless the sewer system utilizes chemical injection for which annual testing will be required.

**Q. PLEASE ADDRESS THE CONCERNS RAISED BY FORTY LOVE POINT CUSTOMERS BARBARA "BOBBIE" KING AND JAY DIXON IN THEIR PREFILED TESTIMONY.**

**A.** The Forty Love sewer system is a LETTS design installed by the developer. LETTS systems are essentially modified septic tanks in which solid waste accumulates in a holding tank with the gray water draining to a common sewer main for transport to the Richland County Utilities treatment plant.

CWS has been working with the Kings and Dixons to determine why their LETTS tanks fail to drain during prolonged rain events. CWS believes the elevation and distance between their finished basements and the sewer main outside provides for no leeway when the sewer main backs up slightly. We currently have a contractor working to install a pump tank that will both pump their



1 water into the main and provide the separation needed to eliminate backups of their homes.

2 CWS is also retaining a professional engineering firm to inspect the system and help us solve  
3 the sewerage backup problems experienced by these customers. We will continue to  
4 communicate with the Forty Love Point Homeowners Association ("HOA") as we move through  
5 the engineering assessment with the outside contractor. CWS and the HOA have agreed to report  
6 their findings to the Commission and ORS in six months – by September 30, 2018.

7 While it is working towards a permanent solution, CWS will continue to alleviate the  
8 problem by dispatching pump trucks to the neighborhood when heavy rains are anticipated. CWS  
9 is also inspecting each LETTS tank and will reseal them as necessary. Reduced water from the  
10 tanks should ease the stress placed on our system.

11 **Q. PLEASE RESPOND TO THE ORS PROPOSAL TO ADJUST OPERATION AND**  
12 **MAINTENANCE EXPENSE FOR SLUDGE HAULING AT THE FRIARSGATE**  
13 **WASTEWATER TREATMENT FACILITY (WWTF). (PAYNE PAGE 8, LINE 10-**  
14 **ADJUSTMENT 9D).**

15 **A.** ORS has proposed to remove \$96,892 in sludge hauling costs associated with the operation  
16 of the Friarsgate WWTF. Rather than allow CWS recovery of its known and measurable sludge  
17 hauling costs, ORS proposes an adjustment to allow CWS recovery of only a three-year average  
18 of annual sludge hauling costs at the Friarsgate WWTF. The Company opposes ORS' proposed  
19 adjustment because the sludge hauling expenses are known and measurable and were prudently  
20 incurred. In addition, ORS' adjustment is contrary to Commission precedent.

21 The Friarsgate WWTF produces large amounts of sludge that must be disposed of in a timely  
22 manner. The amount of sludge produced is dependent on many factors within the process of the  
23 waste water treatment. The active sludge inventory within the process must be kept at a certain  
24 concentration in order for the biological process to be effective and result in a clear compliant



A. Yes, it does.

1 **BY MR. ELLIOTT:**

2 **Q** Now, drawing your attention to your responsive  
3 testimony, the testimony in response to the customer  
4 concerns raised at the various night hearings, let me  
5 draw your attention, if I may, to page five of your  
6 responsive testimony.

7 **A** [GILROY] Yes.

8 **Q** And Ms. Fick raised concerns about the water source for  
9 the Shandon Subdivision in York County. Please explain  
10 the circumstances surrounding the wells in the Shandon  
11 Subdivision.

12 **A** [GILROY] Yes. In the fall of 2015, Well No. 3 in the  
13 Shandon water system tested positive for bacterial  
14 contamination. The distribution system tested negative.  
15 Several attempts were made early in 2016 to rehabilitate  
16 the well to make it useful, but they were unsuccessful,  
17 so a new well source was required. We hired a land  
18 acquisition company to seek suitable properties for a  
19 new well source. During the summer of 2016, it could  
20 find no property owners willing to provide property. In  
21 the fall of 2016, we requested permission from DHEC to  
22 drill a well on company-owned property on which a  
23 wastewater treatment plant was located. Permission was  
24 granted, but unfortunately that well came up dry.

25 In the spring of 2017, a nearby property owner

1 provided land for release for the drilling of multiple  
2 test wells. The CWS – I'm sorry. CWS began drilling  
3 the first well after receiving necessary permits in the  
4 fall of 2017. As of spring of 2018, we have drilled  
5 three wells. One well is less than half of what we need  
6 for capacity and the other two came up dry.

7 Our next step will be to investigate the  
8 feasibility of interconnecting with the closest water  
9 distribution system owned by Carolina Water, which is  
10 Carrolton Place, approximately a half mile away. The  
11 nearest municipal system is a Rock Hill system, which is  
12 approximately three and a half miles away. A project of  
13 this magnitude would take a considerable amount of time  
14 and cost in excess of \$3 million. The company will  
15 investigate the full potential of the existing wells  
16 within the two systems to determine whether an  
17 additional well source or additional storage is needed  
18 for a successful interconnection.

19 **Q** And in the meanwhile, are the Shandon residents, your  
20 customers, getting potable water that meets all federal  
21 and state standards?

22 **A** [GILROY] Yes, we've contracted with a potable water  
23 transporter who deliver water on an as-needed basis to  
24 keep them in potable water – compliant potable water.

25 **Q** Good. Now, I want to direct your attention, if I may,

1 to the two very articulate witnesses this morning at the  
2 public hearing, who live in The Landings. And you were  
3 here for that testimony, were you not?

4 **A** [GILROY] Yes, I was.

5 **Q** You heard their concerns raised in their testimony?

6 **A** [GILROY] Yes, I did.

7 **Q** Would you please explain the systems, water and sewer,  
8 at The Landings and try to address their concerns?

9 **A** [GILROY] As the water system is a purchased-water  
10 system, and we buy water in bulk from the joint  
11 municipal – Lexington County Joint Municipal Water and  
12 Sewer Commission, who receive the water – it originates  
13 at the West Columbia Lake Murray plant, just as the  
14 gentleman said, about 3 miles down the road. The sewer  
15 system in The Landings is kind of a combined system.  
16 It's mostly a LETTS system, similar to Forty Love, or  
17 almost exactly the same as Forty Love, but the newest  
18 phase on a higher elevation, when that went in, they  
19 were able to actually put in a typical gravity system.  
20 That would be on – I think the gentleman lived on  
21 Moontide Court; that would be the newest part that's on  
22 gravity.

23 **Q** And who installs the sewer, the LETTS or the  
24 conventional gravity sewer line in those subdivisions?

25 **A** [GILROY] The developers, at the time the subdivision

1 goes in.

2 **Q** All right. And, last, during the break, just at the end  
3 of the break, the ORS was good enough to point out what  
4 appears to be a typographical error in our proposed  
5 terms and conditions, in our tariff. Would you please  
6 address that for me?

7 **A** [GILROY] Yes. In terms and conditions, under (D) Toxic  
8 and Pretreatment Effluent Guidelines, it states: The  
9 utility will not accept or treat any substance or  
10 materials that have not been found – has not been  
11 defined by the United States Environmental Protection  
12 Agency or the South Carolina Department of Health and  
13 Environmental Control as a toxic pollutant, hazardous  
14 waste, or hazardous substance, including pollutants  
15 falling within the provision of 40 CFR 129.4 and 401.15.

16 In the very first sentence, where it says “that has  
17 not been defined,” it should read “has been defined.”

18 **Q** So it would read –

19 **A** [GILROY] Remove the “not.”

20 **Q** – in the affirmative, “has been defined.”

21 **A** [GILROY] Yes, “has been defined.”

22 **Q** Very fine. You’re asking for that –

23 **A** [GILROY] For “not” to be deleted – the word “not” to be  
24 deleted.

25 **MR. ELLIOTT:** Very fine.



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23 [PURSUANT TO PREVIOUS INSTRUCTION, THE  
24 RESPONSIVE TESTIMONY TO CUSTOMERS' CONCERNS  
25 OF BOB GILROY {W/CORR'NS} FOLLOWS AT PGS 371-380]

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## DOCKET NO. 2017-292WS

1

**WATER QUALITY. PLEASE ADDRESS THESE CONCERNS.**

A. Mr. Lee Kelher testified that, at CWS's request, he conducted a water test analysis in his home on December 6, 2017, and it revealed lead above the EPA action levels.

According to EPA guidelines, lead analytical results are evaluated against an action level. The action level for lead is 0.015 ppm. When the concentration in more than 10 percent of tap water samples collected during any monitoring period is greater than the EPA action level, the system is deemed to have an action level exceedance and consumers must be notified of the health risks associated with lead in drinking water. A system is in compliance when 90 percent of the samples collected are less than or equal to the action level.

River Hills is provided purchased water treated by York County with the appropriate corrosion control treatment in place. Prior to 2015, there was no history of exceeding the lead action limit in the River Hills community. During the 2015 testing period, fewer than 90 percent of the homes tested below the lead action level, meaning the system was not in compliance. Customers in River Hills were notified of the results and provided educational materials on reducing their exposure to lead as required by applicable regulations.

CWS was also required to expand testing from 20 sites to 40, and to test twice a year in 2016. During the first testing period, January-June 2016, Mr. Kelher's residence at 95 Heritage Drive was included as one of the tested sites. More than 90 percent of the homes tested during this period had results below the action level, meaning the system was in compliance. 35 of the 40 homes tested did not have any lead at all. However, the sample from Mr. Kelher's residence exceeded the action level; it was 0.061 ppm. Mr. Kelher was notified of the results and provided educational materials on reducing his risk of exposure, as required by applicable regulations.

During the second testing period, July-December 2016, over 90 percent of the homes tested below the action level, and the system was again in compliance. 25 of the 40 homes tested did not



1 detect any lead at all. However, the sample from Mr. Kelher's residence once again exceeded the  
2 limit; it was 0.019 ppm. Mr. Kelher was again notified of the results and provided educational  
3 materials on reducing his risk of lead exposure.

4 In 2017, the required sampling frequency was reduced to annual testing and the number of  
5 sample sites was reduced to 20, as provided in the federal protocol. Mr. Kelher's residence was  
6 not one of the testing sites that year. During the June-December 2017 testing period, more than  
7 90 percent of the homes tested below the action level, meaning the system remained in compliance.  
8 10 of the 20 homes tested did not show any lead at all. One March 13, 2018, CWS also collected  
9 a source water sample from a hydrant near its master meter from York County, and the test showed  
10 a reading of <0.001 mg/l, which is below the detection level.

11 The lead that has been detected at Mr. Kelher's home may come from his home's plumbing  
12 or fixtures. Over 90 percent of the samples sites in River Hills have not revealed lead over the  
13 past two years, and the most recent source water sampling did not detect lead, indicating that the  
14 water supplied to customers is not the source of lead, and that CWS's River Hills system is well  
15 within allowable limits.

16 **Q. WERE THERE OTHER CONCERNS RAISED CONCERNING WATER**  
17 **QUALITY?**

18 A. Three witnesses, Gerald Tansey, Chuck Ledford, and Al Vesting, testified that they  
19 experienced water stains on their faucets and facilities. Another witness, Mr. Augustine,  
20 complained about chlorine odor. CWS purchases water from York County to service Lake Wylie  
21 customers. However, York County purchases the bulk water from the City of Rock Hill. Both  
22 Rock Hill and York County have an obligation to provide bulk water meeting all state and federal  
23 standards. In collaboration with York County Councilwoman Allison Love, CWS President  
24 Catherine Heigel has agreed on behalf of CWS to test the water provided CWS by York County

for impurities and inform keep Councilwoman Love and CWS's customers of the test results.

**Q. THERE WAS CUSTOMER TESTIMONY CONCERNING THE CONDITION OF METERS. PLEASE EXPLAIN CWS'S RESPONSE.**

**A.** Two witnesses, Chuck Ledford and Andrew Rivan, raised concerns that their meters were set deep in the group and were subject to being covered by debris or water making them difficult to read. While Mr. Ledford's and Mr. Rivan's meters appear to have been read, after inspection by CWS personnel, we decided to raise Mr. Ledford's and Mr. Rivan's meters to accommodate their concerns.

**Q. A COUPLE OF WITNESSES TESTIFIED CONCERNING ODORS FROM LIFT STATIONS. WHAT DID YOU FIND?**

**A.** Mr. Ledford testified that he lived next to a lift station which spilled into a nearby creek for which CWS has been fined. In 2017, CWS has performed these maintenance and repair items at the pump station adjacent to Mr. Ledford:

**Lift Station #2 (Chuck Ledford at 1550 Woodcroft Drive in Carowoods.)**

11/29/2017: CLS replaced both Myers pumps with Hydromatic pumps at LS #2

11/17/2017: CLS pulled and cleaned Pump #1 at LS #2

1/18/2017: CLS replaced cutters on pump #2 at LS #2

1/4/2017: CLS Cleaned out pump #1 LS #2

While we have had operational issues in this subdivision in the past, they have been greatly reduced since CWS began a contractor driven yearly routine maintenance schedule three years ago. In fact, our records do not reflect a Sanitary Sewer Overflow ("SSO") at this lift station in many years.

Mr. Rivan testified concerning an odor emanating from a pump station near his home during wet weather. Below are maintenance, repair, and replacement items for this lift station going back to the beginning of 2017.

LIFT  
////



**Lift Station #53 Maintenance (Andrew Rivan at 4189 Autumn Cove.)**

3/14/18: CLS reprimed Pump 2 LS #53

2/1/18: LS#53- Kraft replaced buzzing relay.

1/30/18: Operator replaced mission battery.

12/4/2017: CLS replaced #1 Suction pump due to crack in casing.

12/2/2017: CLS unclogged pump and replaced motor belt.

11/28/2017: CLS performed annual PM on LS #53

9/27/17: CLS cleaning and repriming pumps.

4-/6/17 Boulware worked at LS# 53 and repaired leaking hose on priming pump on pump 2

3/28/17CLS performed PM on LS# 53

Operational issues have been greatly reduced since CWS began its contractor driven yearly routine maintenance schedule. CWS cannot find any records of any SSOs at this location.

**Q. MS. FICK RAISED CONCERNS ABOUT THE WATER SOURCE FOR THE SHANDON SUBDIVISION IN YORK COUNTY. PLEASE EXPLAIN THE CIRCUMSTANCES SURROUNDING THE WELLS IN THE SHANDON SUBDIVISION.**

**A.** In the fall of 2015, Well #3 in the CWS Shandon water system tested positive for bacterial contamination. The distribution system tested negative. Several attempts were made early in 2016 to rehabilitate the well to make it useful, but they were unsuccessful. Thus, a new well source was required.

CWS hired a land acquisition company to seek suitable properties for a new source well. During the summer of 2016, it could find no property owners willing to provide property. In the fall of 2016, CWS requested permission from DHEC to drill a well on company owned property on which a wastewater treatment plan is located. Permission was granted, but unfortunately the well was dry.

In the spring of 2017, a nearby property owner provided land through a lease for the drilling of multiple test wells. CWS began drilling the first well after receiving necessary permits in the fall 2017. As of spring of 2018, CWS has drilled three wells. One well has less than half of the needed water, and the other two are dry. Our next step will be to investigate the feasibility of

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**Q. KAREN CADELL, A CUSTOMER IN THE FRIARSGATE SUBDIVISION, TESTIFIED THAT SHE WAS AWARE OF 30 HOMES IN HER NEIGHBORHOOD THAT WERE DISCONNECTED FROM SEWER SERVICE FOR FAILURE TO PAY. HAVE YOU INVESTIGATED THIS CONCERN?**

**Q. ALBERTA COIT, WHO LIVES IN THE WASHINGTON HEIGHTS SUBDIVISION, RAISED QUESTIONS ABOUT CWS IMPROVEMENTS IN SERVING HER NEIGHBORHOOD. WHAT CAN YOU TELL THE COMMISSION ABOUT WASHINGTON HEIGHTS?**

**Q. JOE NEILLY OF WEST COLUMBIA TESTIFIED THAT A HOME BURNED DOWN IN HIS NEIGHBORHOOD BECAUSE CWS COULD NOT PROVIDE ADEQUATE WATER PRESSURE TO THE HYDRANTS. HAVE YOU**

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A. The water pressure was lower than normal at the time of that incident because there were two other fully involved fires with multiple fire departments responding in the I-20 service territory at the same time, which put understandable constraints on the I-20 water system. The normal pressure range within Laurel Meadows subdivision is approximately 75 psi.

A. I do not have any comment on Mr. Nettle's plans. Mr. Nettles did acknowledge, however, that CWS provides good service. We will continue to do so for as long as Mr. Nettles and his neighbors remain our customers.

A. Many of the customers who testified in Greenville appear to have experienced problems with their own service lines, as opposed to those belonging to the company. However, after hearing from our customers at the night hearing in Greenville, we have our Area Manager inspecting CWS's lines in the Canterbury subdivision with a camera to see if there are any issues that need to be addressed now or in the future.

A. CWS responded to sewer drain stoppage called in by Ms. Lyons on January 21, 2018. The



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1 Q. DOES THIS CONCLUDE YOUR RESPONSIVE TESTIMONY?

2 A. Yes, it does.

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1                   **MR. ELLIOTT:** That's all I have of this  
2                   witness, Mr. Chair. I think we have, perhaps, an  
3                   arrangement for these witnesses to stand down, and  
4                   have Mr. D'Ascendis to come up. I'll defer to Mr.  
5                   Terreni on that.

6                   **MR. TERRENI:** That was our arrangement. I  
7                   believe, Mr. Chairman, what we would like to do is  
8                   call Mr. D'Ascendis, so he can get a flight out of  
9                   town.

10                  **CHAIRMAN WHITFIELD:** I understand everybody is  
11                  in agreement to that, as well –

12                  **MR. TERRENI:** That's correct.

13                  **CHAIRMAN WHITFIELD:** – as Mr. Elliott stated.  
14                  That will be fine.

15                               [WHEREUPON, the witnesses stood aside.]

16                               [Witness sworn]

17                  THEREUPON came,

18                               **D Y L A N   W .   D ' A S C E N D I S ,**  
19                  called as a witness on behalf of the Applicant, Carolina  
20                  Water Service, who, having been first duly sworn, was  
21                  examined and testified as follows:

22                                       **DIRECT EXAMINATION**

23                  **BY MR. TERRENI:**

24                  **Q**     Mr. D'Ascendis, please state your name for the record.

25                  **A**     My name is Dylan W. D'Ascendis.

1 Q And what's your occupation?

2 A I'm a director at ScottMadden, Inc.

3 Q Mr. D'Ascendis, have you prepared or caused to be  
4 prepared 37 pages of direct testimony that was prefiled  
5 in this case?

6 A Yes, I did.

7 Q And that direct testimony, was it accompanied by an  
8 Appendix A and an Exhibit 1 with Schedules DWD-1 through  
9 DWD-5?

10 A It was.

11 Q Do you have any additions or corrections that you wish  
12 to make to that testimony?

13 A No, I don't.

14 Q If I were to ask you the questions posed in that  
15 testimony, would your answers on the stand be the same  
16 as they are in the written testimony?

17 A They would.

18 MR. TERRENI: Mr. Chairman, I'd like to move  
19 the direct testimony of Dylan W. D'Ascendis into  
20 the record as if given orally from the stand.

21 CHAIRMAN WHITFIELD: Mr. D'Ascendis' direct  
22 testimony will be entered into the record as if  
23 given orally from the stand. So ordered.

24 MR. TERRENI: Thank you.

25 <

1 **BY MR. TERRENI:**

2 **Q** Mr. D'Ascendis, have you prepared 15 pages of rebuttal  
3 testimony that was prefiled in this case.

4 **A** I did.

5 **Q** And is that rebuttal testimony accompanied by Schedules  
6 DWD-1R through DWD-6R?

7 **A** Yes.

8 **Q** Do you have any additions or corrections you wish to  
9 make to your rebuttal testimony?

10 **A** I do.

11 **Q** Please tell the Commission what they are.

12 **A** Sure. On page seven, line three, please strike nine-  
13 fifty – 9.50 percent and replace it with 9.57 percent.  
14 And then because of that one change, there are some  
15 additional changes on page 14. So, on line six of page  
16 14, please strike 9.50 percent and replace it with 9.57  
17 percent. Then on line seven, please strike 9.60  
18 percent – or, 10.60 percent, and replace it with 10.62  
19 percent. Then, on Table 1 of that same page, on the  
20 first column under “Discounted Cash Flow,” could you  
21 please strike 8.68 percent and replace it with 8.82  
22 percent. And that next column over, replace the 9.50  
23 percent with 9.57 percent. And then the averages on  
24 those two columns are now 9.08 percent and 10.62  
25 percent.

1                   And then on line 14 of page 14, please replace  
2                   10.60 percent with 10.62 percent.

3                   And then there's two more. On line eight of page  
4                   15, please replace 10.60 percent with 10.62 percent, and  
5                   11.10 percent with 11.12 percent. And that's the  
6                   entirety of my corrections?

7       **Q**       Do those corrections reflect the revised testimony of  
8                   Dr. Carlisle?

9       **A**       They do. Thank you, yeah.

10      **Q**       Mr. D'Ascendis, if I were to ask you the questions in  
11                   your rebuttal testimony, as corrected, would your  
12                   answers be the same if you gave them orally on the  
13                   stand?

14      **A**       They would.

15                   **MR. TERRENI:** Mr. Chairman, with that, I would  
16                   move the rebuttal testimony, with Schedules, of Mr.  
17                   D'Ascendis into the record as if given orally from  
18                   the stand.

19                   **CHAIRMAN WHITFIELD:** Yes, Mr. Terreni, we will  
20                   enter the rebuttal testimony into the record as if  
21                   given orally from the stand.

22                   **MR. TERRENI:** Thank you, Mr. Chairman.

23                   Mr. Terreni, did you want to enter his  
24                   exhibits in?

25                   **MR. TERRENI:** Yes, I thought I'd moved them



1 in.

2 **CHAIRMAN WHITFIELD:** We haven't done that.

3 **MR. TERRENI:** Okay. I would move Mr.

4 D'Ascendis's exhibits to his direct testimony and  
5 to his rebuttal testimony into the record.

6 **CHAIRMAN WHITFIELD:** All right. Mr. Terreni,  
7 we're going to make his exhibits with his direct  
8 testimony Hearing Exhibit No. 8 and his Exhibits  
9 DWD-1R through -6R, his rebuttal testimony, we'll  
10 make that Hearing Exhibit No. 9.

11 [WHEREUPON, Hearing Exhibit Nos. 8 and 9  
12 were marked and received in evidence.]

13 **MR. TERRENI:** Thank you, Mr. Chairman. I  
14 apologize, because, you know, I do this about every  
15 hearing I have at the Commission.

16 **CHAIRMAN WHITFIELD:** We'll forgive you. We'll  
17 forgive you this time.

18 **MR. TERRENI:** I appreciate that.

19 **BY MR. TERRENI:**

20 **Q** Mr. D'Ascendis, I know you've prepared summaries of your  
21 testimony for the Commission. But before you give those  
22 summaries, I'd like the opportunity to introduce you and  
23 reintroduce you to the Commissioners, and ask you a  
24 couple of questions about your background. Where did  
25 you go to school?

1     **A**     I went to undergrad at University of Pennsylvania, where  
2             I majored in Economic History.

3     **Q**     And did you go to graduate school?

4     **A**     I did. I went to Rutgers University in New Jersey and  
5             got an MBA in Finance and International Business, with  
6             honors.

7     **Q**     Do you have any professional certifications?

8     **A**     I do. I'm a certified rate-of-return analyst and a  
9             certified valuation analyst.

10    **Q**     Have you testified before this Commission before?

11    **A**     I have. I think in Tega Cay, before they were merged  
12             into CWS, and then the last two CWS cases.

13    **Q**     Have you testified before other commissions?

14    **A**     Yes, I've presented testimony in 30 or so different  
15             proceedings in 15 different state jurisdictions.

16    **Q**     And have you given testimony on the issue of rate of  
17             return and return on equity?

18    **A**     Yes, I have.

19    **Q**     And are those credentials available in more detail in  
20             Appendix A to your testimony?

21    **A**     They are.

22    **Q**     Thank you. Mr. D'Ascendis, have you prepared a summary  
23             of your direct testimony?

24    **A**     I have.

25    **Q**     Would you please give that summary, and I will follow

1 with you to display exhibits that are in your testimony.

2 [Reference: Presentation Slide 1]

3 A Yeah, sure.

4 [Reference: Presentation Slide 2]

5 So my direct testimony recommends that the  
6 Commission allow or consider the company an opportunity  
7 to earn an overall rate of return of between 8.60  
8 percent and 8.86 percent. This is based on CWS's  
9 parent, Utilities, Inc., consolidated capital structure,  
10 which consists of 48.11 percent debt at an embedded debt  
11 cost rate of 6.60, and 51.89 percent equity at my  
12 recommended range of common equity cost rates, which  
13 range between 10.45 and 10.95 percent.

14 I derive the range of common equity by applying  
15 market-based rate-of-return models to a proxy group of  
16 publicly traded water utilities which are comparable in  
17 risk to CWS.

18 [Reference: Presentation Slide 3]

19 Applying these models, it's consistent with the  
20 principle of the fair rate of return established in *Hope*  
21 and *Bluefield*, especially the corresponding risk  
22 standard, which mandates that an authorized return on  
23 equity should be commensurate with returns in other  
24 enterprises having corresponding risks. However, no  
25 proxy group of comparable companies could be identical

1 to any single company, which includes CWS, so after  
2 applying those models to the proxy group, one must take  
3 a look at the relative risk between CWS or the target  
4 company and the proxy group company, to see whether or  
5 not there would be any type of adjustments to that rate  
6 to reflect extra risk or less risk, depending on what  
7 the company is.

8 So this chart up here is part of my – part of – I  
9 think it's page two of DWD-1. These are the results of  
10 the market models for the water utility group. As you  
11 can see, I used the discounted cash flow model, the risk  
12 premium model, the capital asset pricing model, for the  
13 utility proxy group, and then the results are 8.64 for  
14 the discounted cash flow model, 10.69 percent for the  
15 risk premium model, and for the capital asset pricing  
16 model I came to 10.51. So after I made those – or after  
17 we applied these cost of common equity models to the  
18 utility proxy group, I then applied those same models to  
19 a group of non-regulated companies that I found to be  
20 comparable in total risk to the water utility group.

21 Now, when I talk about total risk, it means –  
22 there's two definitions, and one would be the sum of  
23 financial and business risk, would equal total risk.  
24 And there's another, where it's systematic or market  
25 risk, plus non-systematic or diversifiable risk. So, in

1 my selection criteria for my non-regulated companies, I  
2 used a measure of systematic risk, which was the  
3 unadjusted beta, and the non-systematic risk, which was  
4 the residual standard error of the regression. If the  
5 non-price-regulated company met the range set by the  
6 proxy group companies, I included them in my non-  
7 regulated proxy group. That selection criteria netted a  
8 result of 28 non-price-regulated companies, which are –

9 [Reference: Presentation Slide 4-5]

10 – which are right here in front of you. But they  
11 are comparable, at least in my view, in total risk to  
12 the water proxy group.

13 Now, could you go back one?

14 **Q** Yes [indicating].

15 **A** I think you're looking at 3.

16 **Q** Oh, okay. You want the proxy group?

17 **A** No, I want the results.

18 **Q** Okay.

19 [Reference: Presentation Slide 3]

20 **A** So as I applied the cost of common equity models to that  
21 non-regulated group, we came to 12.06 percent, which was  
22 applying the discounted cash flow, the risk premium, and  
23 the capital asset pricing model to the non-regulated  
24 group.

25 In view of the sum total of those results, I



1 averaged them and got 10.45 percent. Like I said  
2 earlier, once you get the results based on proxy group,  
3 you have to then look at the relative risk between CWS  
4 and the proxy group. So since water companies and  
5 wastewater companies, they have similar operating risk,  
6 so the only thing that came to mind when I was looking  
7 for relative risk, it was size. So I took – I took a  
8 look at two studies, one by Roger Ibbetson and the other  
9 one by Duff & Phelps, and they use seven measures of  
10 company size and related size premiums over the CAPM.  
11 And the seven measures are market capitalization,  
12 average market value, average book value, average market  
13 value of invested capital – which is the market value of  
14 both debt and equity, and preferred if there is some –  
15 average total assets, average sales, and average number  
16 of employees. Then, as shown on my DWD-8 of my direct  
17 testimony, the risk premiums range from 134 to 408 basis  
18 points, based on CWS compared with the average proxy  
19 group company. In order to be conservative, I took 50  
20 basis points as my size adjustment.

21 Given my average result of 10.45 and the size  
22 adjustment of 50 basis points, I came up with a size-  
23 adjusted common equity cost rate of 10.95. From there,  
24 I concluded that a reasonable range of common equity  
25 cost rates was 10.45 to 10.95.

1                   And that completes the summary of my direct  
2           testimony.

23 [PURSUANT TO PREVIOUS INSTRUCTION, THE  
24 PREFILED DIRECT TESTIMONY OF DYLAN W.  
25 D'ASCENDIS FOLLOWS AT PGS 392-430]

## DOCKET NO. 2017-292-WS

**Application of Carolina Water Service, )  
Inc. For Adjustment )  
of Rates and Charges and )  
Modification of Certain Terms and )  
Conditions for the Provision of )  
Water and Sewer Service )**

**Dylan W. D'Ascendis, CRRA**  
**Director**  
**ScottMadden, Inc.**

## Carolina Water Service, Inc.

February 26, 2018

ACCEPTED FOR PUBLICATION 12/18/2018

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### A. Witness Identification

A. My name is Dylan W. D'Ascendis. My business address is 3000 Atrium Way, Suite 241, Mount Laurel, NJ 08054.

A. I am a Director at ScottMadden, Inc.

**Q. PLEASE SUMMARIZE YOUR PROFESSIONAL EXPERIENCE AND EDUCATIONAL BACKGROUND.**

A. I offer expert testimony on behalf of investor-owned utilities on rate of return issues and class cost of service issues. I also assist in the preparation of rate filings, including but not limited to revenue requirements and original cost and lead/lag studies. I am a graduate of the University of Pennsylvania, where I received a Bachelor of Arts degree in Economic History. I also hold a Master of Business Administration from Rutgers University with a concentration in Finance and International Business, which was conferred with high honors. I am a Certified Rate of Return Analyst (“CRRA”) and a Certified Valuation Analyst (“CVA”). My full professional qualifications are provided in Appendix A.



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**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

Q. HAVE YOU PREPARED AN EXHIBIT IN SUPPORT OF YOUR RECOMMENDATION?

**Q. WHAT IS YOUR RECOMMENDED COST OF CAPITAL FOR CWS?**

A. I recommend that the South Carolina Public Service Commission (“SC PSC” or the “Commission”) authorize the Company the opportunity to earn an overall rate of return within a range of 8.60% to 8.86% based on a test year ended December 31, 2017. The ratemaking capital structure consists of 48.11% long-term debt, at an embedded debt cost rate of 6.60%, and 51.89% common equity at my recommended range of common equity cost rates between 10.45% and 10.95%. The overall rate of return is summarized on page 1 of Schedule DWD-1 and in Table 1 below:

**Table 1: Summary of Overall Rate of Return**

<u>Type of Capital</u>	<u>Ratios</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Long-Term Debt	48.11%	6.60%	3.18%
Common Equity	<u>51.89%</u>	10.45% - 10.95%	<u>5.42% - 5.68%</u>
Total	100.00%		8.60% - 8.86%

**III. SUMMARY****Q. PLEASE SUMMARIZE YOUR RECOMMENDED RANGE OF COMMON EQUITY COST RATES.**

A. My recommended range of common equity cost rates between 10.45% and 10.95% is summarized on page 2 of Schedule DWD-1. I have assessed the market-based common equity cost rates of companies of relatively similar, but not necessarily identical, risk to CWS. Using companies of relatively comparable risk as proxies is consistent with the principles of fair rate of return established in the *Hope*<sup>1</sup> and *Bluefield*<sup>2</sup> cases. No proxy group can be identical in risk to any single company, so there must be an evaluation of relative risk between the company and the proxy group to see if it is appropriate to make adjustments to the proxy group's indicated rate of return.

My recommendation results from the application of several cost of common equity models, specifically the Discounted Cash Flow ("DCF") model, the Risk Premium Model ("RPM"), and the Capital Asset Pricing Model ("CAPM"), to the market data of a proxy group of eight water companies ("Utility Proxy Group") whose selection criteria will be discussed below. In addition, I also applied the DCF, RPM, and CAPM to a proxy group

<sup>1</sup> *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

<sup>2</sup> *Bluefield Water Works Improvement Co. v. Public Serv. Comm'n*, 262 U.S. 679 (1922).

of domestic, non-price regulated companies comparable in total risk to the eight water companies ("Non-Price Regulated Proxy Group").

The results derived from each are as follows:

**Table 2: Summary of Common Equity Cost Rate**

	<u>Utility Proxy Group</u>
Discounted Cash Flow Model	8.64%
Risk Premium Model	10.69
Capital Asset Pricing Model	10.51
Cost of Equity Models Applied to Comparable Risk, Non-Price Regulated Companies	<u>12.06</u>
Indicated Common Equity Cost Rate Before Adjustment	10.45%
Size Adjustment	<u>0.50</u>
Indicated Common Equity Cost Rate Cost Rate after Adjustment	<u>10.95%</u>
Recommended Range of Common Equity Cost Rates	<u>10.45% - 10.95%</u>

After analyzing the indicated common equity cost rates derived by these models, I conclude that a common equity cost rate of 10.45% for the Company is indicated before any Company-specific adjustment. I then adjusted the indicated common equity cost rate upward by 0.50% to reflect CWS's smaller relative size as compared with the members of the Utility Proxy Group, resulting in a size-adjusted indicated common equity cost rate of 10.95%. Based on these results, I recommend the Commission consider a range of common equity cost rates between 10.45% and 10.95% for use in setting rates for the Company.



1    **IV.    GENERAL PRINCIPLES**

2    **Q.    WHAT GENERAL PRINCIPLES HAVE YOU CONSIDERED IN ARRIVING AT**  
3    **YOUR RECOMMENDED RANGE OF COMMON EQUITY COST RATES?**

4    A.    In unregulated industries, the competition of the marketplace is the principal determinant  
5    of the price of products or services. For regulated public utilities, regulation must act as a  
6    substitute for marketplace competition. Assuring that the utility can fulfill its obligations  
7    to the public while providing safe and reliable service at all times requires a level of  
8    earnings sufficient to maintain the integrity of presently invested capital. Sufficient  
9    earnings also permit the attraction of needed new capital at a reasonable cost, for which the  
10   utility must compete with other firms of comparable risk, consistent with the fair rate of  
11   return standards established by the U.S. Supreme Court in the previously cited *Hope* and  
12   *Bluefield* cases. Consequently, marketplace data must be relied on in assessing a common  
13   equity cost rate appropriate for ratemaking purposes. Just as the use of the market data for  
14   the proxy group adds reliability to the informed expert judgment used in arriving at a  
15   recommended common equity cost rate, the use of multiple generally accepted common  
16   equity cost rate models also adds reliability and accuracy when arriving at a recommended  
17   common equity cost rate.

18    **A.    Business Risk**

19    **Q.    PLEASE DEFINE BUSINESS RISK AND EXPLAIN WHY IT IS IMPORTANT TO**  
20    **THE DETERMINATION OF A FAIR RATE OF RETURN.**

21    A.    Business risk is the riskiness of a company's common stock without the use of debt and/or  
22    preferred capital. Examples of such general business risks faced by all utilities (*i.e.*,  
23    electric, natural gas distribution, and water) include size, the quality of management, the

regulatory environment in which they operate, customer mix, and concentration of customers, service territory growth, and capital intensity. All of these have a direct bearing on earnings.

Consistent with the basic financial principle of risk and return, business risk is important to the determination of a fair rate of return because the higher the level of risk, the higher the rate of return investors demand.

**Q. WHAT BUSINESS RISKS DO THE WATER AND WASTEWATER INDUSTRIES FACE IN GENERAL?**

A. Water and wastewater utilities have an ever-increasing responsibility to be stewards of the environment from which supplies are drawn in order to preserve and protect essential natural resources of the United States. Compliance with the Safe Water Drinking Act and response to continuous monitoring by the Environmental Protection Agency (“EPA”) and state and local governments of the water supply for potential contaminants and their resultant regulations directly result in increased environmental stewardship by water utilities. This, plus aging infrastructure, necessitate additional capital investment in the distribution and treatment of water, exacerbating the pressure on free cash flows arising from increased capital expenditures for infrastructure repair and replacement. The significant amount of capital investment and, hence, high capital intensity, is a major risk factor for the water and wastewater utility industry.

*Value Line Investment Survey* (“*Value Line*”) observes the following about the water utility industry:

One of the most positive attributes of the water industry is that companies and regulatory authorities usually work together reasonably well. This isn't always the case in other domestic regulated markets, such as electricity. In general, regulators realize



1 that the U.S. went decades without plowing enough capital back into  
 2 the pipelines and wastewater facilities. Now they realize that a huge  
 3 amount of funds have to be directed toward fixing their systems.

4 We cannot underestimate the importance of a positive regulatory  
 5 climate. Essentially, they determine a utility's allowed return on  
 6 equity. Should there be a sea change in this area, it would greatly  
 7 impact this group in our opinion.<sup>3</sup>

8 The water and wastewater industries also experience low depreciation rates.  
 9 Depreciation rates are one of the principal sources of internal cash flows for all utilities  
 10 (through a utility's depreciation expense), and are vital to a company to fund ongoing  
 11 replacements and repairs of the system. Water / wastewater utilities' assets have long lives,  
 12 and therefore have long capital recovery periods. As such, they face greater risk due to  
 13 inflation, which results in a higher replacement cost per dollar of net plant.

14 Substantial capital expenditures, as noted by *Value Line*, will require significant  
 15 financing. The three sources of financing typically used are debt, equity (common and  
 16 preferred), and cash flow. All three are intricately linked to the opportunity to earn a  
 17 sufficient rate of return as well as the ability to achieve that return. Consistent with *Hope*  
 18 and *Bluefield*, the return must be sufficient to maintain credit quality as well as enable the  
 19 attraction of necessary new capital, be it debt or equity capital. If unable to raise debt or  
 20 equity capital, the utility must turn to either retained earnings or free cash flow,<sup>4</sup> both of  
 21 which are directly linked to earning a sufficient rate of return. The level of free cash flow  
 22 represents a company's ability to meet the needs of its debt and equity holders. If either  
 23 retained earnings or free cash flow is inadequate, it will be nearly impossible for the utility  
 24 to attract the needed new capital to invest in new infrastructure to ensure quality service to

<sup>3</sup> *Value Line Investment Survey*, October 13, 2017.

<sup>4</sup> Free Cash Flow = Operating Cash Flow (funds from operations) minus Capital Expenditures.

its customers. An insufficient rate of return can be financially devastating for utilities and a public safety issue for their customers.

The water and wastewater utility industry's high degree of capital intensity and low depreciation rates, coupled with the need for substantial infrastructure capital spending, require regulatory support in the form of adequate and timely rate relief, particularly a sufficient authorized return on common equity, so that the industry can successfully meet the challenges it faces.

**B. Financial Risk**

**Q. PLEASE DEFINE FINANCIAL RISK AND EXPLAIN WHY IT IS IMPORTANT TO THE DETERMINATION OF A FAIR RATE OF RETURN.**

**A.** Financial risk is the additional risk created by the introduction of debt and preferred stock into the capital structure. The higher the proportion of debt and preferred stock in the capital structure, the higher the financial risk (*i.e.* likelihood of default). Therefore, consistent with the basic financial principle of risk and return, investors demand a higher common equity return as compensation for bearing higher default risk.

**Q. CAN BOND AND CREDIT RATINGS BE A PROXY FOR THE COMBINED BUSINESS AND FINANCIAL RISKS (I.E., INVESTMENT RISK OF AN ENTERPRISE)?**

**A.** Yes, similar bond ratings/issuer credit ratings reflect, and are representative of, similar combined business and financial risks (*i.e.*, total risk) faced by bond investors.<sup>5</sup> Although

<sup>5</sup> Risk distinctions within S&P's bond rating categories are recognized by a plus or minus, *i.e.*, within the A category, an S&P rating can be at A+, A, or A-. Similarly, risk distinctions for Moody's ratings are distinguished by numerical rating gradations, *i.e.*, within the A category, a Moody's rating can be A1, A2 and A3.



specific business or financial risks may differ between companies, the same bond/credit rating indicates that the combined risks are roughly similar, albeit not necessarily equal, as the purpose of the bond/credit rating process is to assess credit quality or credit risk and not common equity risk.

**Q. THAT BEING SAID, DO RATING AGENCIES REFLECT COMPANY SIZE IN THEIR BOND RATINGS?**

A. No. Neither S&P nor Moody's have minimum company size requirements for any given rating level. This means, all else equal, a relative size analysis needs to be conducted for companies with similar bond ratings.

**V. CAPITAL STRUCTURE**

**Q. WHAT CAPITAL STRUCTURE RATIOS DO YOU RECOMMEND BE EMPLOYED IN DEVELOPING AN OVERALL FAIR RATE OF RETURN APPROPRIATE FOR THE COMPANY?**

A. I recommend the use of a ratemaking capital structure consisting of 48.11% long-term debt and 51.89% common equity as shown on page 1 of Schedule DWD-1. This capital structure is based on a test year capital structure for Utilities, Inc., CWS's parent company, ended December 31, 2017.

**Q. HOW DOES YOUR PROPOSED RATEMAKING COMMON EQUITY RATIO OF 51.89% FOR CWS COMPARE WITH THE TOTAL EQUITY RATIOS MAINTAINED BY THE COMPANIES IN YOUR UTILITY PROXY GROUP?**

A. My proposed ratemaking common equity ratio of 51.89% for CWS is reasonable and consistent with the range of total equity ratios maintained, on average, by the companies

in the Utility Proxy Group on which I base my recommended common equity cost rate. As shown on page 2 of Schedule DWD-2, the common equity ratios of the Utility Proxy Group range from 45.17% to 60.60%, with a midpoint of 52.89% and an average of 53.75% in 2016. The equity ratio, on average, maintained by the Utility Proxy Group is higher than the equity ratio requested by the Company.

In my opinion, a capital structure consisting of 48.11% long-term debt and 51.89% total equity is appropriate for ratemaking purposes for CWS in the current proceeding because it is comparable, but conservative to the average capital structure ratios (based on total permanent capital) maintained, on average, by the water companies in the Utility Proxy Group on whose market data I base my recommended common equity cost rate.

**Q. WHAT COST RATE FOR LONG-TERM DEBT IS MOST APPROPRIATE FOR USE IN A COST OF CAPITAL DETERMINATION FOR CWS?**

A. A long-term debt cost rate of 6.60% is reasonable and appropriate as it is based on a test year of Utilities, Inc.'s ("UI") long-term debt outstanding ending December 31, 2017.

## **VI. CAROLINA WATER SERVICE, INC. AND UTILITY PROXY GROUP SELECTION**

**Q. HAVE YOU REVIEWED FINANCIAL DATA FOR CWS?**

A. Yes. CWS is the surviving entity after the merger of the four UI operating subsidiaries in South Carolina.<sup>6</sup> The merged company serves approximately 26,400 water and sewer customers throughout South Carolina. CWS is a wholly-owned subsidiary of UI, which is a wholly-owned subsidiary of Corix, Inc. CWS's common stock is not publicly traded.

<sup>6</sup> The four merged companies are as follows: Carolina Water Service, Inc., United Utility Companies, Inc., Utility Services of South Carolina, and Southland Utilities, Inc.

1 Q. PLEASE EXPLAIN HOW YOU CHOSE YOUR PROXY GROUP OF EIGHT  
2 WATER COMPANIES.

3 A. The basis of selection for the Utility Proxy Group was to select those companies which  
4 meet the following criteria:

- 5 (i) They are included in the Water Utility Group of *Value Line's Standard Edition*  
6 (October 13, 2017);
- 7 (ii) They have 70% or greater of 2016 total operating income and 70% or greater of  
8 2016 total assets attributable to regulated water operations;
- 9 (iii) At the time of the preparation of this testimony, they had not publicly announced  
10 that they were involved in any major merger or acquisition activity (*i.e.*, one  
11 publicly-traded utility merging with or acquiring another);
- 12 (iv) They have not cut or omitted their common dividends during the five years ending  
13 2016 or through the time of the preparation of this testimony;
- 14 (v) They have *Value Line* and Bloomberg adjusted betas;
- 15 (vi) They have a positive *Value Line* five-year dividends per share ("DPS") growth rate  
16 projection; and
- 17 (vii) They have *Value Line*, Reuters, Zacks, or Yahoo! Finance consensus five-year  
18 earnings per share ("EPS") growth rate projections.

19 The following eight companies met these criteria: American States Water Co.,  
20 American Water Works Co., Inc., Aqua America, Inc., California Water Service Group,  
21 Connecticut Water Service, Inc., Middlesex Water Co., SJW Corp., and York Water Co.



**Q. PLEASE DESCRIBE SCHEDULE DWD-2, PAGE 1.**

A. Page 1 of Schedule DWD-2 contains comparative capitalization and financial statistics for the eight water companies identified above for the years 2012 to 2016.

During the five-year period ending 2016, the historically achieved average earnings rate on book common equity for the group averaged 10.56%. The average common equity ratio based on total permanent capital (excluding short-term debt) was 53.13%, and the average dividend payout ratio was 56.73%.

Total debt to earnings before interest, taxes, depreciation, and amortization (“EBITDA”) for the years 2012 to 2016 ranges between 3.40 and 3.83, with an average of 3.63. Funds from operations to total debt range from 20.86% to 25.95%, with an average of 23.18%.

## VII. COMMON EQUITY COST RATE MODELS

**Q. ARE YOUR COST OF COMMON EQUITY MODELS MARKET-BASED MODELS?**

A. Yes. The DCF model is market-based because market prices are used in developing the dividend yield component of the model. The RPM is market-based because the bond ratings and expected bond yields used in the application of the RPM reflect the market's assessment of bond/credit risk. In addition, the use of beta coefficients ( $\beta$ ) to determine the equity risk premium reflects the market's assessment of market/systematic risk since beta coefficients are derived from regression analyses of market prices. The Predictive Risk Premium Model ("PRPM") uses monthly market returns in addition to expectations of the risk-free rate. The CAPM is market-based for many of the same reasons that the RPM is market-based (*i.e.*, the use of expected bond yields and betas). Selection of the

comparable risk non-price regulated companies is market-based because it is based on statistics which result from regression analyses of market prices and reflect the market's assessment of total risk.

**A. Discounted Cash Flow Model**

**Q. WHAT IS THE THEORETICAL BASIS OF THE DCF MODEL?**

A. The theory underlying the DCF model is that the present value of an expected future stream of net cash flows during the investment holding period can be determined by discounting those cash flows at the cost of capital, or the investors' capitalization rate. DCF theory indicates that an investor buys a stock for an expected total return rate, which is derived from cash flows received in the form of dividends plus appreciation in market price (the expected growth rate). Mathematically, the dividend yield on market price plus a growth rate equals the capitalization rate, *i.e.*, the total common equity return rate expected by investors.

**Q. WHICH VERSION OF THE DCF MODEL DO YOU USE?**

A. I use the single-stage constant growth DCF model.

**Q. PLEASE DESCRIBE THE DIVIDEND YIELD YOU USED IN YOUR APPLICATION OF THE DCF MODEL.**

A. The unadjusted dividend yields are based on the proxy companies' dividends as of October 13, 2017, divided by the average of closing market prices for the 60 trading days ending October 13, 2017.<sup>7</sup>

<sup>7</sup> See Schedule DWD-3, page 1, column 1.

A. Because dividends are paid periodically (quarterly), as opposed to continuously (daily), an adjustment must be made to the dividend yield. This is often referred to as the discrete, or the Gordon Periodic, version of the DCF model.

**Q. PLEASE EXPLAIN THE BASIS OF THE GROWTH RATES YOU APPLY TO THE UTILITY PROXY GROUP IN YOUR DCF MODEL.**

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Over the long run, there can be no growth in dividends per share ("DPS") without growth in EPS. Security analysts' earnings expectations have a more significant influence on market prices than dividend expectations. Thus, the use of earnings growth rates in a DCF analysis provides a better match between investors' market price appreciation expectations and the growth rate component of the DCF.

**Q. PLEASE SUMMARIZE THE DCF MODEL RESULTS.**

A. As shown on page 1 of Schedule DWD-3, the mean result of the application of the single-stage DCF model is 8.86%, the median result is 8.42%, and the average of the two is 8.64% for the Utility Proxy Group. In arriving at a conclusion for the DCF-indicated common equity cost rate for the Utility Proxy Group, I have relied on an average of the mean and the median results of the DCF. This approach takes into consideration all of the proxy companies' results while mitigating the high and low outliers of those individual results.

**B. The Risk Premium Model**

**Q. PLEASE DESCRIBE THE THEORETICAL BASIS OF THE RPM.**

A. The RPM is based on the fundamental financial principle of risk and return, namely, that investors require greater returns for bearing greater risk. The RPM recognizes that common equity capital has greater investment risk than debt capital, as common equity shareholders are behind debt holders in any claim on a company's assets and earnings. As a result, investors require higher returns from common stocks than from investment in bonds, to compensate them for bearing the additional risk.

While it is possible to directly observe bond returns and yields, investors' required common equity return cannot be directly determined or observed. According to RPM theory, one can estimate a common equity risk premium over bonds (either historically or

prospectively), and use that premium to derive a cost rate of common equity. The cost of common equity equals the expected cost rate for long-term debt capital, plus a risk premium over that cost rate, to compensate common shareholders for the added risk of being unsecured and last-in-line for any claim on the corporation's assets and earnings in the event of a liquidation.

**Q. PLEASE EXPLAIN HOW YOU DERIVED YOUR INDICATED COST OF COMMON EQUITY BASED ON THE RPM.**

A. I relied on the results of the application of two risk premium methods. The first method is the PRPM, while the second method is a risk premium model using a total market approach.

**Q. PLEASE EXPLAIN THE PRPM.**

A. The PRPM, published in the *Journal of Regulatory Economics ("JRE")*,<sup>8</sup> was developed from the work of Robert F. Engle, who shared the Nobel Prize in Economics in 2003 "for methods of analyzing economic time series with time-varying volatility ("ARCH")."<sup>9</sup> Engle found that volatility changes over time and is related from one period to the next, especially in financial markets. Engle discovered that the volatility in prices and returns clusters over time and is therefore highly predictable and can be used to predict future levels of risk and risk premiums.

The PRPM estimates the risk / return relationship directly, as the predicted equity risk premium is generated by the prediction of volatility or risk. The PRPM is not based

<sup>8</sup> Autoregressive conditional heteroscedasticity. See "A New Approach for Estimating the Equity Risk Premium for Public Utilities", Pauline M. Ahern, Frank J. Hanley and Richard A. Michelfelder, Ph.D. The Journal of Regulatory Economics (December 2011), 40:261-278.

<sup>9</sup> www.nobelprize.org.



on an estimate of investor behavior, but rather on the evaluation of the results of that behavior (*i.e.*, the variance of historical equity risk premiums).

The inputs to the model are the historical returns on the common shares of each company in the Utility Proxy Group minus the historical monthly yield on long-term U.S. Treasury securities through September 2017. Using a generalized form of ARCH, known as GARCH, I calculate each Utility Proxy Group company's projected equity risk premium using Eviews<sup>10</sup> statistical software. When the GARCH Model is applied to the historical return data, it produces a predicted GARCH variance series<sup>10</sup> and a GARCH coefficient<sup>11</sup>. Multiplying the predicted monthly variance by the GARCH coefficient and annualizing it<sup>12</sup> produces the predicted annual equity risk premium. I then add the forecasted 30-year U.S. Treasury Bond yield, 3.58%<sup>13</sup>, to each company's PRPM-derived equity risk premium to arrive at an indicated cost of common equity. The 30- year Treasury yield is a consensus forecast derived from the Blue Chip Financial Forecasts ("Blue Chip")<sup>14</sup>. The mean PRPM indicated common equity cost rate for the Utility Proxy Group is 11.48%, the median is 11.41%, and the average of the two is 11.45%. Consistent with my reliance on the average of the median and mean results of the DCF, I will rely on the average of the mean and median results of the Utility Proxy Group PRPM to calculate a cost of common equity rate of 11.45%.

<sup>10</sup> Illustrated on Columns 1 and 2 of page 2 of Schedule DWD-4.

<sup>11</sup> Illustrated on Column 4 of page 2 of Schedule DWD-4.

<sup>12</sup> Annualized Return = (1+Monthly Return)<sup>12</sup> - 1

<sup>13</sup> See column 6 of page 2 of Schedule DWD-4.

<sup>14</sup> *Blue Chip Financial Forecasts*, October 1, 2017 at p. 2 and June 1, 2017 at p. 14.

**Q. PLEASE EXPLAIN THE TOTAL MARKET APPROACH RPM.**

**Q. PLEASE EXPLAIN THE BASIS OF THE EXPECTED BOND YIELD OF 4.92% APPLICABLE TO THE UTILITY PROXY GROUP.**

Since the Utility Proxy Group's average Moody's long-term issuer rating is A2/A3, another adjustment to the expected A2 public utility bond yield is needed to reflect the difference in bond ratings. An upward adjustment of 0.06%, which represents one-sixth of

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a recent spread between A2 and A3 public utility bond yields, is necessary to make the A2 prospective bond yield applicable to an A2/A3 public utility bond.<sup>16</sup> Adding the 0.06% to the 4.86% prospective A2 public utility bond yield results in a 4.92% expected bond yield for the Utility Proxy Group.

**Q. PLEASE EXPLAIN THE DERIVATION OF THE BETA-DERIVED EQUITY RISK PREMIUM.**

A. The components of the beta derived risk premium model are: 1) An expected market equity risk premium over corporate bonds, and 2) the beta coefficient. The derivation of the beta-derived equity risk premium that I apply to the Utility Proxy Group is shown on lines 1 through 11 of page 8 of Schedule DWD-4. The total beta-derived equity risk premium I apply is based on an average of: 1) Historical data-based equity risk premiums; 2) *Value Line*-based equity risk premiums; and 3) Bloomberg-based equity risk premium. Each of these is described in turn.

**Q. HOW DID YOU DERIVE A MARKET EQUITY RISK PREMIUM BASED ON LONG-TERM HISTORICAL DATA?**

A. To derive a historical market equity risk premium, I used the most recent holding period returns for the large company common stocks from the 2017 Stocks, Bonds, Bills, and Inflation (“SBBI”) Yearbook (“SBBI – 2017”)<sup>17</sup> less the average historical yield on Moody’s Aaa/Aa-rated corporate bonds for the period 1928 to 2016. The use of holding period returns over a very long period of time is appropriate because it is consistent with

<sup>16</sup> As shown on Line No. 4 and explained in note 3 on page 3 of Schedule DWD-4.

<sup>17</sup> SBBI Appendix A Tables: Morningstar Stocks, Bonds, Bills, & Inflation 1926-2016.

the long-term investment horizon presumed by investing in a going concern, *i.e.*, a company expected to operate in perpetuity.

SBBI's long-term arithmetic mean monthly total return rate on large company common stocks was 11.69% and the long-term arithmetic mean monthly yield on Moody's Aaa/Aa-rated corporate bonds was 6.13%.<sup>18</sup> As shown on line 1 of page 8 of Schedule DWD-4, subtracting the mean monthly bond yield from the total return on large company stocks results in a long-term historical equity risk premium of 5.56%.

I used the arithmetic mean monthly total return rates for the large company stocks and yields (income returns) for the Moody's Aaa/Aa corporate bonds, because they are appropriate for the purpose of estimating the cost of capital as noted in SBBI – 2017.<sup>19</sup> The use of the arithmetic mean return rates and yields is appropriate because historical total returns and equity risk premiums provide insight into the variance and standard deviation of returns needed by investors in estimating future risk when making a current investment. If investors relied on the geometric mean of historical equity risk premiums, they would have no insight into the potential variance of future returns because the geometric mean relates the change over many periods to a constant rate of change, thereby obviating the year-to-year fluctuations, or variance, which is critical to risk analysis.

**Q. PLEASE EXPLAIN THE DERIVATION OF THE REGRESSION-BASED MARKET EQUITY RISK PREMIUM.**

A. To derive the regression analysis-derived market equity risk premium of 7.37%, shown on line 2 of page 8 of Schedule DWD-4, I used the same monthly annualized total returns on

<sup>18</sup> As explained in note 1 on page 8 of Schedule DWD-4.

19 SBBI – 2017, at 10-22.



large company common stocks relative to the monthly annualized yields on Moody's Aaa/Aa corporate bonds as mentioned above. The relationship between interest rates and the market equity risk premium was modeled using the observed monthly market equity risk premium as the dependent variable, and the monthly yield on Moody's Aaa/Aa corporate bonds as the independent variable. I used a linear Ordinary Least Squares ("OLS") regression, in which the market equity risk premium is expressed as a function of the Moody's Aaa/Aa corporate bonds yield:

$$RP = \alpha + \beta (R_{Aaa/Aa})$$

**Q. PLEASE EXPLAIN THE DERIVATION OF A PRPM EQUITY RISK PREMIUM.**

A. I used the same PRPM approach described previously to develop another equity risk premium estimate. The inputs to the model are the historical monthly returns on large company common stocks minus the monthly yields on Aaa/Aa corporate bonds during the period from January 1928 through September 2017.<sup>20</sup> Using the previously discussed generalized form of ARCH, known as GARCH, the projected equity risk premium is determined using Eviews<sup>®</sup> statistical software. The resulting PRPM predicted market equity risk premium is 5.91%.<sup>21</sup>

The average historical data-based equity risk premium is 6.28%, which is shown on line 4 of page 8 of Schedule DWD-4.

<sup>20</sup> Data from January 1926-December 2016 is from SBBI – 2017. Data from January – September 2017 is from Bloomberg Professional Services.

<sup>21</sup> Shown on Line No. 3 of page 8 of Schedule DWD-4.

1 Q. PLEASE EXPLAIN THE DERIVATION OF A PROJECTED EQUITY RISK  
2 PREMIUM BASED ON VALUE LINE DATA FOR YOUR RPM ANALYSIS.

3 A. As noted previously, because both ratemaking and the cost of capital, including the cost  
4 rate of common equity, are prospective, a prospective market equity risk premium is  
5 essential. The derivation of the forecasted or prospective market equity risk premium can  
6 be found in note 4 on page 8 of Schedule DWD-4. Consistent with my calculation of the  
7 dividend yield component in my DCF analysis, this prospective market equity risk  
8 premium is derived from an average of the three- to five-year median market price  
9 appreciation potential by *Value Line* for the thirteen weeks ending October 13, 2017, plus  
10 an average of the median estimated dividend yield for the common stocks of the 1,700  
11 firms covered in *Value Line*'s Standard Edition.<sup>22</sup>

12 The average median expected price appreciation is 33%, which translates to a  
13 7.39% annual appreciation, and, when added to the average of *Value Line*'s median  
14 expected dividend yields of 2.06%, equates to a forecasted annual total return rate on the  
15 market of 9.45%. The forecasted Aaa bond yield of 4.61% is deducted from the total  
16 market return of 9.45%, resulting in an equity risk premium of 4.84%, shown on page 8,  
17 line 5 of Schedule DWD-4.

18 Q. PLEASE EXPLAIN THE DERIVATION OF AN EQUITY RISK PREMIUM  
19 BASED ON THE S&P 500 COMPANIES.

20 A. Using data from *Value Line*, I calculate an expected total return on the S&P 500 using  
21 expected dividend yields and long-term growth estimates as a proxy for capital  
22 appreciation. The expected total return for the S&P 500 is 14.30%. Subtracting the

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<sup>22</sup> As explained in detail in page 2, note 1 of Schedule DWD-5.

The average *Value Line*-based Equity risk premium is 7.26%, which is shown on Line No. 7 on page 8 of Schedule DWD-4.

A. Using data from Bloomberg Professional Services, I calculate an expected total return on the S&P 500 using expected dividend yields and long-term growth estimates as a proxy for capital appreciation, identical to the method described above. The expected total return for the S&P 500 is 13.92%. Subtracting the prospective yield on Aaa Corporate bonds of 4.61% results in a 9.31% projected equity risk premium.

A. I give equal weight to equity risk premiums based on each source, historical, *Value Line*, and Bloomberg in arriving at my conclusion of 7.62%.<sup>23</sup>

<sup>23</sup> 7.62% = (6.28% + 7.26% + 9.31%)/3. See Line No. 9 on page 8 of Schedule DWD-4.

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Proxy Group is 0.77. Multiplying the beta coefficient of the Utility Proxy Group of 0.77 by the market equity risk premium of 7.62% results in a beta-adjusted equity risk premium of 5.87% for the Utility Proxy Group.

**Q. HOW DID YOU DERIVE THE EQUITY RISK PREMIUM BASED ON THE S&P UTILITY INDEX AND MOODY'S A-RATED PUBLIC UTILITY BONDS?**

A. I estimate three equity risk premiums based S&P Utility Index holding returns, and two equity risk premiums based on the expected returns of the S&P Utilities Index, using *Value Line* and Bloomberg data, respectively. Turning first to the S&P Utility Index holding period returns, I derive a long-term monthly arithmetic mean equity risk premium between the S&P Utility Index total returns of 10.57% and monthly A-rated public utility bond yields of 6.61% from 1928 to 2016 to arrive at an equity risk premium of 3.96%.<sup>24</sup> I then use the same historical data to derive an equity risk premium of 5.59% based on a regression of the monthly equity risk premiums. The final S&P Utility Index holding period equity risk premium involves applying the PRPM using the historical monthly equity risk premiums from January 1928 to September 2017 to arrive at a PRPM-derived equity risk premium of 3.96% for the S&P Utility Index. The average of the three S&P Utilities Index holding return equity risk premiums is 4.50%.

I then derive expected total returns on the S&P Utilities Index of 9.06% and 8.60% using data from *Value Line* and Bloomberg Professional Services, respectively, and subtract the prospective A2-rated public utility bond yield (4.86%<sup>25</sup>), which results in risk premiums of 4.20% and 3.74%, respectively. As with the market equity risk premiums, I

<sup>24</sup> As shown on Line No. 1 of page 12 of Schedule DWD-4.

25 Derived on Line No. 3 of page 3 of Schedule DWD-4.

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A. The equity risk premium I apply to the Utility Proxy Group is 5.01%, which is the average of the beta-derived and the S&P utility equity risk premiums of 5.87% and 4.15%, respectively.<sup>27</sup>

A. As shown on Line No. 7 of Schedule DWD-4, page 3, I calculate a common equity cost rate of 9.93% for the Utility Proxy Group based on the total market approach of the RPM.

A. As shown on page 1 of Schedule DWD-4, the indicated RPM-derived common equity cost rate is 10.69%, which gives equal weight to the PRPM (11.45%) and the adjusted market approach results (9.93%).

A. CAPM theory defines risk as the co-variability of a security's returns with the market's returns as measured by the beta coefficient ( $\beta$ ). A beta coefficient less than 1.0 indicates

27 As shown on page 7 of Schedule DWD-4.

lower variability than the market as a whole, while a beta coefficient greater than 1.0 indicates greater variability than the market.

The CAPM assumes that all other risk (*i.e.*, all non-market or unsystematic risk) can be eliminated through diversification. The risk that cannot be eliminated through diversification is called market, or systematic, risk. In addition, the CAPM presumes that investors require compensation only for systematic risk, which is the result of macroeconomic and other events that affect the returns on all assets. The model is applied by adding a risk-free rate of return to a market risk premium, which is adjusted proportionately to reflect the systematic risk of the individual security relative to the total market as measured by the beta coefficient. The traditional CAPM model is expressed as:

$$R_s = R_f + \beta(R_m - R_f)$$

Where:

$R_s$	=	Return rate on the common stock
$R_f$	=	Risk-free rate of return
$R_m$	=	Return rate on the market as a whole
$\beta$	=	Adjusted beta coefficient (volatility of the security relative to the market as a whole)

Numerous tests of the CAPM have measured the extent to which security returns and beta coefficients are related as predicted by the CAPM, confirming its validity. The empirical CAPM ("ECAPM") reflects the reality that while the results of these tests support the notion that the beta coefficient is related to security returns, the empirical Security Market Line ("SML") described by the CAPM formula is not as steeply sloped as the predicted SML.<sup>28</sup> In view of theory and practical research, I have applied both the

<sup>28</sup> Roger A. Morin, New Regulatory Finance (Public Utility Reports, Inc., 2006), at p. 175.

### WHAT BETA COEFFICIENTS DID YOU USE IN YOUR CAPM ANALYSIS?

**PLEASE DESCRIBE YOUR SELECTION OF A RISK-FREE RATE OF RETURN.**

**WHY IS THE YIELD ON LONG-TERM U.S. TREASURY BONDS APPROPRIATE FOR USE AS THE RISK-FREE RATE?**

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(i.e., cost of capital) will be applied. In contrast, short-term U.S. Treasury yields are more volatile and largely a function of Federal Reserve monetary policy.

**Q. PLEASE EXPLAIN THE ESTIMATION OF THE EXPECTED RISK PREMIUM FOR THE MARKET USED IN YOUR CAPM ANALYSES.**

A. The basis of the market risk premium is explained in detail in Note 1 on Schedule DWD-5.

As discussed previously, the market risk premium is derived from an average of:

- 1) Historical data-based market risk premiums;
- 2) *Value Line* data-based market risk premiums; and
- 3) Bloomberg data-based market risk premium.

The long-term income return on U.S. Government Securities of 5.17% was deducted from the SBBI-2017 monthly historical total market return of 11.97%, which results in an historical market equity risk premium of 6.80%.<sup>29</sup> I applied a linear OLS regression to the monthly annualized historical returns on the S&P 500 relative to historical yields on long-term U.S. Government Securities from SBBI-2017. That regression analysis yielded a market equity risk premium of 8.60%. The PRPM market equity risk premium is 6.69%, and is derived using the PRPM relative to the yields on long-term U.S. Treasury securities from January 1926 through September 2017. The average of the historical data-based market risk premiums is 7.36%.<sup>30</sup>

The *Value Line*-derived forecasted total market equity risk premium is derived by deducting the forecasted risk-free rate of 3.58%, discussed above, from the *Value Line* projected total annual market return of 9.45%, resulting in a forecasted total market equity

<sup>29</sup> SBBI – 2017, at Appendix A-1 (1) through A-1 (3) and Appendix A-7 (19) through A-7 (21).

<sup>30</sup>  $7.36\% = (6.80\% + 8.60\% + 6.69\%)/3$ .



risk premium of 5.87%. The S&P 500 projected market equity risk premium using *Value Line* data is derived by subtracting the projected risk-free rate of 3.58% from the projected total return of the S&P 500 of 14.30%. The resulting market equity risk premium is 10.72%. The average *Value Line* market risk premium is 8.29%.<sup>31</sup>

The S&P 500 projected market equity risk premium using Bloomberg data is derived by subtracting the projected risk-free rate of 3.58% from the projected total return of the S&P 500 of 13.92%. The resulting market equity risk premium is 10.34%.

These three sources (historical, *Value Line*, and Bloomberg), when averaged, result in an average total market equity risk premium of 8.67%.<sup>32</sup>

**Q. WHAT ARE THE RESULTS OF YOUR APPLICATION OF THE TRADITIONAL AND EMPIRICAL CAPM TO THE UTILITY PROXY GROUP?**

A. As shown on page 1 of Schedule DWD-5, the mean result of my CAPM/ECAPM analyses is 10.43%, the median is 10.58%, and the average of the two is 10.51%. Consistent with my reliance on the average of mean and median DCF results discussed above, the indicated common equity cost rate using the CAPM/ECAPM is 10.51%.

**D. Common Equity Cost Rates for a Proxy Group of Domestic, Non-Price Regulated Companies Based on the DCF, RPM, and CAPM**

**Q. WHY DO YOU ALSO CONSIDER A PROXY GROUP OF DOMESTIC, NON-PRICE REGULATED COMPANIES?**

A. In the *Hope* and *Bluefield* cases, the U.S. Supreme Court did not specify that comparable risk companies had to be utilities. Since the purpose of rate regulation is to be a substitute

<sup>31</sup>  $8.29\% = (5.87\% + 10.72\%)/2.$ 

32  $8.67\% = (7.36\% + 8.29\% + 10.34\%)/3.$

for the competition of the marketplace, non-price regulated firms operating in the competitive marketplace make an excellent proxy if they are comparable in total risk to the Utility Proxy Group being used to estimate the cost of common equity. The selection of such domestic, non-price-regulated competitive firms theoretically and empirically results in a proxy group which is comparable in total risk to the Utility Proxy Group.

**Q. HOW DID YOU SELECT UNREGULATED COMPANIES THAT ARE COMPARABLE IN TOTAL RISK TO THE REGULATED PUBLIC UTILITY PROXY GROUP?**

A. In order to select a proxy group of domestic, non-price regulated companies similar in total risk to the Utility Proxy Group, I relied on the beta coefficients and related statistics derived from *Value Line* regression analyses of weekly market prices over the most recent 260 weeks (*i.e.*, five years). Using these selection criteria results in a proxy group of twenty-eight domestic, non-price regulated firms comparable in total risk to the Utility Proxy Group. Total risk is the sum of non-diversifiable market risk and diversifiable company-specific risks. The criteria used in the selection of the domestic, non-price regulated firms were:

- 1) They must be covered by *Value Line Investment Survey* (Standard Edition);
- 2) They must be domestic, non-price regulated companies, *i.e.*, non-utilities;
- 3) Their beta coefficients must lie within plus or minus two standard deviations of the average unadjusted beta of the Utility Proxy Group; and
- 4) The residual standard errors of the *Value Line* regressions, which gave rise to the unadjusted beta coefficients, must lie within plus or minus two standard deviations of the average residual standard error of the Utility Proxy Group.



Pages 3 through 5 contain the data and calculations that support the 11.91% RPM cost rate. As shown on Line No. 1 of page 3 of Schedule DWD-7, the consensus prospective yield on Moody's Baa rated corporate bonds for the six quarters ending in the

first quarter of 2019, and for the years 2019 to 2023 and 2024 to 2028, is 5.36%.<sup>33</sup> When the beta-adjusted risk premium of 6.55%,<sup>34</sup> relative to the Non-Price Regulated Proxy Group, is added to the prospective Baa2 rated corporate bond yield of 5.36%, the indicated RPM cost rate is 11.91%.

Page 6 contains the inputs and calculations that support my indicated CAPM/ECAPM cost rate of 11.15%.

**Q. HOW IS THE COST RATE OF COMMON EQUITY BASED ON THE NON-PRICE REGULATED PROXY GROUP COMPARABLE IN TOTAL RISK TO THE UTILITY PROXY GROUP?**

A. As shown on page 1 of Schedule DWD-7, the results of the DCF, RPM, and CAPM, applied to the Non-Price Regulated Proxy Group comparable in total risk to the Utility Proxy Group, are 13.57%, 11.91%, and 11.15%, respectively. The average of the mean and median of these models is 12.06%, which I use as the indicated common equity cost rate for the Non-Price Regulated Proxy Group.

#### **VIII. CONCLUSION OF COMMON EQUITY COST RATE BEFORE ADJUSTMENTS**

**Q. WHAT IS THE INDICATED COMMON EQUITY COST RATE BEFORE ADJUSTMENTS?**

A. Based on the results of the application of multiple cost of common equity models to the Utility Proxy Group and the Non-Price Regulated Proxy Group, the indicated cost of equity before adjustments is 10.45%. I use multiple cost of common equity models as primary tools in arriving at my recommended common equity cost rate, because no single model is

<sup>33</sup> *Blue Chip Financial Forecasts*, October 1, 2017 at p. 2 and June 1, 2017, at p. 14.

<sup>34</sup> Derived on page 5 of Schedule DWD-7.



Based on these common equity cost rate results, I conclude that a common equity cost rate of 10.45% is reasonable and appropriate for the Company before any adjustment is made for relative risk between the Company and the Utility Proxy Group. The 10.45% indicated ROE is the approximate average of the results produced by my application of the models as explained above.

### A. Size Adjustment

A. Yes. The Company has greater relative risk than the average company in the Utility Proxy Group because of its smaller size compared with the group, as measured by an estimated market capitalization of common equity for CWS (whose common stock is not publicly-traded).

**Table 5: Size as Measured by Market Capitalization for the Company  
and the Utility Proxy Group**

	<u>Market Capitalization*</u> (\$ Millions)	<u>Times Greater than the Company</u>
CWS	\$57.209	
Utility Proxy Group	\$3,543.646	61.9x

\*From page 1 of Schedule DWD-8.

The Company's estimated market capitalization was at \$57.209 million as of October 13, 2017, compared with the market capitalization of the average water company in the Utility Proxy Group of \$3.544 billion as of October 13, 2017. The Utility Proxy Group's market capitalization is 61.9 times the size of CWS's estimated market capitalization.

**Q. PLEASE EXPLAIN WHY SIZE HAS A BEARING ON BUSINESS RISK.**

A. Company size is a significant element of business risk for which investors expect to be compensated through higher returns. Generally, smaller companies are less able to cope with significant events that affect sales, revenues, and earnings. For example, smaller companies face more risk exposure to business cycles and economic conditions, both nationally and locally. Additionally, the loss of revenues from a few larger customers would have a greater effect on a small company than on a much larger company with a larger, more diverse, customer base.

Further evidence of the risk effects of size include the fact that investors demand greater returns to compensate for the lack of marketability and liquidity of the securities of smaller firms. For these reasons, the Commission should authorize a cost of common

equity in this proceeding that reflects CWS's relevant risk, including the impact of its small size.

As a result, it is necessary to upwardly adjust the indicated common equity cost rate of 10.45% to reflect CWS's greater risk due to its smaller relative size. The determination is based on the size premiums for portfolios of New York Stock Exchange ("NYSE"), American Stock Exchange ("AMEX"), and NASDAQ listed companies ranked by deciles for the 1926 to 2016 period. The average size premium for the Utility Proxy Group with a market capitalization of \$3.545 billion falls in the 5<sup>th</sup> decile, while CWS's market capitalization of \$57.209 million puts the Company in the 10<sup>th</sup> decile. The size premium spread between the 5<sup>th</sup> decile and the 10<sup>th</sup> decile is 4.08%. Even though a 4.08% upward size adjustment is indicated, I apply a size premium of 0.50% to CWS's indicated common equity cost rate.

**Q. DID YOU EVALUATE CWS'S PARENT, UTILITIES, INC.'S ESTIMATED MARKET CAPITALIZATION COMPARED TO THE PROXY GROUP?**

A. Yes. Even though I do not think it is applicable<sup>35</sup>, I looked at Utilities, Inc.'s common equity balance at December 31, 2016. I then adjusted it by the proxy group market-to-book ratio and compared it with the proxy group. Utilities, Inc.'s estimated market capitalization, \$699.722 million<sup>36</sup>, would fall in between the 8<sup>th</sup> and 9<sup>th</sup> deciles, which would indicate a 0.87% size premium over the average proxy group company.

35 It is Mr. D'Ascendis' opinion that the parent company's size is irrelevant in setting rates for one of its jurisdictional subsidiaries. Regulation is required to look at each operating utility as a stand-alone company since they can only set rates for that particular utility and no other operating subsidiary outside of their jurisdiction.

36  $\$212.230\text{M} \times 329.7\% = \$699.722\text{M}$



**Q. DID YOU EVALUATE OTHER MEASURES OF RELATIVE SIZE BETWEEN CWS AND THE PROXY GROUP?**

- Market Value of Common Equity
- Book Value of Common Equity
- Market Value of Invested Capital
- Total Assets
- Total Sales
- Number of Employees

**Q. WHAT IS THE INDICATED COST OF COMMON EQUITY AFTER YOUR ADJUSTMENT FOR SIZE?**

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A. Yes, it does

1 **BY MR. TERRENI:**

2 **Q** Have you prepared a summary of your rebuttal testimony?

3 **A** I have.

4 **Q** Could you please present that to the Commission at this  
5 time?

6 [Reference: Presentation Slide 6]

7 **A** Sure. My rebuttal testimony respectfully disagrees with  
8 Dr. Carlisle's recommended long-term debt cost rate of  
9 6.58, which does not include issuance costs, and his  
10 recommended return on equity of 9.08. Throughout my  
11 rebuttal testimony, I take exception to several inputs  
12 of Dr. Carlisle's ROE analysis, which include – and I  
13 have seven points listed here, if you can bear with me –  
14 number one is use of historical and projected growth in  
15 book value per share, dividends per share, and sales  
16 growth for use in his DCF analysis, despite substantial  
17 amounts of academic literature stating that the superior  
18 measure of growth in a DCF analysis is projected  
19 earnings-per-share growth. Number two, his decile  
20 hybrid calculation of his market return overstates the  
21 actual expected return on the market due to his  
22 overweighting of the returns of small companies. Number  
23 three, his use of the geometric mean market return is  
24 not appropriate for cost-of-capital purposes, as it does  
25 not reflect the variance or risk of the market return,

1 which is proven to be random based on measures of serial  
2 correlation. Four, his failure to use the E-CAPM, which  
3 is the empirical CAPM, in his CAPM analysis causes his  
4 analysis not to reflect the empirical studies that show  
5 the flattening of the security market line, which has  
6 observed low beta stocks performing slightly better than  
7 predicted in the CAPM analysis and high beta stocks  
8 performing slightly less better than what was – slightly  
9 less than what was projected in the original CAPM.  
10 Number five, his selection criteria for his comparable  
11 risk group in the CEM analysis is only based on  
12 systematic risk. As I said in my direct testimony,  
13 systematic risk plus non-systematic risk, which equals  
14 total risk. So my belief is that my selection criteria  
15 is more robust than his. Number six, his measure of  
16 expected return in his CEM analysis, which is growth in  
17 book value, is not, alone, enough to measure an expected  
18 return on equity for his comparable group. And,  
19 finally, number seven, his omission of a size premium in  
20 his recommendation does not reflect the inherent risk of  
21 CWS compared to his water proxy group.

22 Now, in my rebuttal testimony, I did correct his  
23 models based on my critiques. And from that, I get an  
24 average of 10.62, but right here it's not showing, but a  
25 size adjustment of 50 basis points would get you up to

1 11.12.

2 And that would conclude my summary of my rebuttal  
3 testimony.

4 MR. TERRENI: Thank you, Mr. D'Ascendis.  
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23 [PURSUANT TO PREVIOUS INSTRUCTION, THE  
24 PREFILED REBUTTAL TESTIMONY OF DYLAN W.  
25 D'ASCENDIS {W/CORR'NS} FOLLOWS AT PGS 434-450]



Corrections noted herein reflect the testimony  
given during the hearing in this matter.

**BEFORE THE  
PUBLIC SERVICE COMMISSION  
OF SOUTH CAROLINA**

**DOCKET NO. 2017-292-WS**

**In the Matter of:**

**Application of Carolina Water Service, )  
Inc. of Rates and Charges and )  
Modification of Certain Terms and )  
Conditions for the Provision of )  
Water and Sewer Service )**

**Prepared Rebuttal Testimony**

**of**

**Dylan W. D'Ascendis, CRRA, CVA  
Director  
ScottMadden, Inc.**

**On Behalf of**

**Carolina Water Service, Inc.**

**March 19, 2018**

ACCEPTED FOR FILING BY THE PUBLIC SERVICE COMMISSION OF SOUTH CAROLINA: 19 APR 2018 10:10 AM BY: JESSICA L. HARRIS, CLERK

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Dr. Carlisle Corrected DCF Calculation	Schedule DWD-1R
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Selection of a Non-Price Regulated Proxy Group Similar in Risk to Dr. Carlisle's Water Proxy Group	Schedule DWD-5R
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**Introduction**

**Q. Please state your name, occupation, and business address.**

A. My name is Dylan W. D'Ascendis and I am a Director at ScottMadden, Inc. My business address is 3000 Atrium Way, Suite 241, Mount Laurel, NJ 08054.

**Q. Are you the same Dylan W. D'Ascendis who previously submitted prepared direct testimony in this proceeding?**

A. Yes, I am.

**Q. Have you prepared an exhibit which supports your rebuttal testimony?**

A. Yes, I have. It has been marked for identification as Rebuttal Exhibit No. 1 and consists of Schedules DWD-1R through DWD-6R.

**Purpose**

**Q. What is the purpose of this testimony?**

A. The purpose of this testimony is to address certain aspects of the direct testimony of Douglas H. Carlisle, Ph.D, witness for the Office of the Regulatory Staff (ORS). Specifically, I will address Dr. Carlisle's recommended capital structure for Carolina Water Service, Inc. ("CWS" or the Company) and his opinion regarding their long-term debt cost rate; his use of multiple proxies for growth and his overall application of his Discounted Cash Flow ("DCF") Model; his application of the Capital Asset Pricing Model ("CAPM"); his application of the Comparable Earnings Model ("CEM"); and his failure to reflect the risk of CWS's relative small size in relation to the proxy group in his common equity cost rate recommendation.

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<sup>1</sup> 0.01% x \$55,524,404 = \$5,552.44.



1 **Q. Do you agree with Dr. Carlisle's refusal to adopt the ratemaking long-term debt cost**  
2 **rate of CWS because of its interest-only and make-whole provisions as well as**  
3 **higher-than normal interest rate? Please explain.**

4 A. No, I do not. Most of the long-term debt of public utilities consist of long-term issuances  
5 without sinking fund payments or amortizing principal payments. Most of these issuances  
6 simply pay interest only while the debt is outstanding and then pay a "balloon" payment  
7 of the entire principal at maturity or when refinanced. There are some issuances, like that  
8 of CWS's parent, Utilities, Inc. ("UI") which pay interest only for a period of time and  
9 then begin to make sinking fund payments to reduce both the debt outstanding and the  
10 average term of the debt, which serves to add the 0.02% to the Notes' coupon rate of  
11 6.58% to reflect issuance costs. Dr. Carlisle has not offered any evidence that UI's  
12 decision to issue the Series 2006-A Collateral Trust Notes was imprudent or unreasonable  
13 at the time. In fact, at the time of issue, the 6.58% coupon rate was in line with Baa  
14 utility bond yields.

15 **Discounted Cash Flow Model (DCF)**

16 **Q. On page 6, line 14, through page 7, line 11 of his direct testimony, Dr. Carlisle**  
17 **discusses his use of various measures of growth for his DCF analyses. Please**  
18 **comment.**

19 A. Dr. Carlisle used historical and projected measures of growth in earnings per share  
20 ("EPS"), book value per share ("BVPS"), dividends per share ("DPS"), and sales/revenue  
21 as provided by *Value Line Investment Survey* ("*Value Line*"). As discussed in my direct  
22 testimony at page 14, lines 14 through 22, it is appropriate to rely exclusively on security  
23 analysts' forecasted growth rates in EPS. While Dr. Carlisle did note that his approach





strong influence on the expectations of many investors who do not possess the resources to make their own forecasts, that is, they are a cause of g. The accuracy of these forecasts in the sense of whether they turn out to be correct is not at issue here, as long as they reflect widely held expectations. As long as the forecasts are typical and/or influential in that they are consistent with current stock price levels, they are relevant. The use of analysts' forecasts in the DCF model is sometimes denounced on the grounds that it is difficult to forecast earnings and dividends for only one year, let alone for longer time periods. This objection is unfounded, however, because it is present investor expectations that are being priced; it is the consensus forecast that is embedded in price and therefore in required return, and not the future as it will turn out to be.

\* \* \*

Published studies in the academic literature demonstrate that growth forecasts made by security analysts represent an appropriate source of DCF growth rates, are reasonable indicators of investor expectations and are more accurate than forecasts based on historical growth. These studies show that investors rely on analysts' forecasts to a greater extent than on historic data only.

Studies performed by Cragg and Malkiel<sup>4</sup> demonstrate that analysts' forecasts are superior to historical growth rate extrapolations. Some question the accuracy of analysts' forecasts of EPS growth, however, it does not really matter what the level of accuracy of those analysts' forecasts is well after the fact. What is important is that they reflect widely held expectations influencing investors at the time they make their pricing decisions and hence the market prices they pay.

In addition, Jeremy J. Siegel also supports the use of security analysts' EPS growth forecasts when he states<sup>5</sup>:

For the equity holder, the source of future cash flows is the earnings of firms. (p.

<sup>4</sup> Cragg, John G. and Malkiel, Burton G., Expectations and the Structure of Share Prices (University of Chicago Press, 1982), Chapter 4.

<sup>5</sup> Jeremy J. Siegel, Stocks for the Long Run – The Definitive Guide to Financial Market Returns and Long-Term Investment Strategies, McGraw-Hill 2002, pp. 90-94.

90)

\* \* \*

Some people argue that shareholders most value stocks' cash dividends. But this is not necessarily true. (p. 91)

\* \* \*

Since the price of a stock depends primarily on the present discounted value of all expected future dividends, it appears that dividend policy is crucial to determining the value of the stock. However, this is not generally true. (p. 92)

\* \* \*

Since stock prices are the present value of future dividends, it would seem natural to assume that economic growth would be an important factor influencing future dividends and hence stock prices. However, this is not necessarily so. The determinants of stock prices are earnings and dividends on a *per-share* basis. Although economic growth may influence *aggregate* earnings and dividends favorably, economic growth does not necessarily increase the growth of per-share earnings or dividends. It is earnings per share (EPS) that is important to Wall Street because per-share data, not aggregate earnings or dividends, are the basis of investor returns. (*italics in original*) (pp. 93-94)

Investors are also aware of the accuracy of past forecasts, whether for EPS or DPS growth, or for interest rate levels. Investors have no prior knowledge of the accuracy of any forecasts available at the time they make their investment decisions, as that accuracy only becomes known after some future period of time has elapsed. Therefore, given the overwhelming academic/empirical support regarding the superiority of security analysts' EPS growth rate forecasts, such EPS growth rate projections should be relied upon in a cost of common equity analysis.

Since investors have such analysts' earnings growth rate projections available to them, and investors are aware of the superiority of such projections, analysts' projections of EPS growth should receive significant, if not exclusive, weight in a DCF analysis.

**Q. What would Dr. Carlisle's DCF result have been had he correctly relied upon security analysts' forecasted growth in EPS?**



A. As shown on Schedule DWD-1R, using the average dividend yield for Dr. Carlisle's water proxy group, 2.11% (from Exhibit DHC-9) and the average forecasted growth in EPS of 7.31%,<sup>6</sup> an indicated common equity cost rate of ~~9.50%~~ <sup>9.57%</sup> results.<sup>7</sup> The DCF result for Dr. Carlisle's proxy group using just the projected EPS growth rate from *Value Line* is 11.01%.<sup>8</sup>





1 **Q. Is there additional documentation in the academic literature that supports the**  
 2 **arithmetic mean, or simple average, as the only mean appropriate for cost of capital**  
 3 **analysis?**

4 A. Yes. The financial literature is quite clear on this point. Risk is measured by the  
 5 variability of expected returns, i.e. the probability distribution of returns. As noted above,  
 6 the arithmetic mean calculated over a very long period of time is the correct mean to use  
 7 when estimating the cost of capital.

8 Weston and Brigham<sup>13</sup> provide the standard financial textbook definition of the  
 9 riskiness of an asset when they state:

10 The riskiness of an asset is defined in terms of the likely variability of  
 11 future returns from the asset. (emphasis added)  
 12

13 Morin<sup>14</sup> states:

14 The geometric mean answers the question of what constant return you  
 15 would have to achieve in each year to have your investment growth match  
 16 the return achieved by the stock market. The arithmetic mean answers the  
 17 question of what growth rate is the best estimate of the future amount of  
 18 money that will be produced by continually reinvesting in the stock  
 19 market. It is the rate of return which, compounded over multiple periods,  
 20 gives the mean of the probability distribution of ending wealth. (emphasis  
 21 added)  
 22

23 In addition, Brealey and Myers<sup>15</sup> note:

24 The proper uses of arithmetic and compound rates of return from past  
 25 investments are often misunderstood... Thus, the arithmetic average of the  
 26 returns correctly measures the opportunity cost of capital for investments...  
 27 *Moral:* If the cost of capital is estimated from historical returns or risk  
 28 premiums, use arithmetic averages, not compound annual rates of return.  
 29 (italics in original)

<sup>13</sup> J. Fred Weston and Eugene F. Brigham, Essentials of Managerial Finance, 3<sup>rd</sup> Ed. (The Dryden Press, 1974), p. 272.

<sup>14</sup> Morin, p. 133.

<sup>15</sup> Richard A. Brealey and Stewart C. Myers, Principles of Corporate Finance (McGraw-Hill Publications, Inc., 1996), pp. 146-147.

As noted above, investors gain insight into relative riskiness by analyzing expected future variability. Even more simply, using the geometric mean to estimate the equity risk premium is tantamount to reading the first and last page of a world history book and presuming to know what happened during the course of human events. Consequently, Dr. Carlisle should have relied on the arithmetic market return of 11.8% shown on page 7-13 of the SBBI-2017.

**Q. Dr. Carlisle neglected to include an ECAPM in his analysis. Please comment.**

A. Numerous tests of the CAPM have measured the extent to which security returns and betas are related as predicted by the CAPM confirming its validity. However, Morin observes that while the results of these tests support the notion that beta is related to security returns, the empirical Security Market Line ("SML") described by the CAPM formula is not as steeply sloped as the predicted SML. Morin<sup>16</sup> states:

With few exceptions, the empirical studies agree that ... low-beta securities earn returns somewhat higher than the CAPM would predict, and high-beta securities earn less than predicted.

\* \* \*

Therefore, the empirical evidence suggests that the expected return on a security is related to its risk by the following approximation:

$$K = R_F + x \beta(R_M - R_F) + (1-x) \beta(R_M - R_F)$$

where x is a fraction to be determined empirically. The value of x that best explains the observed relationship  $\text{Return} = 0.0829 + 0.0520 \beta$  is between 0.25 and 0.30. If  $x = 0.25$ , the equation becomes:

$$K = R_F + 0.25(R_M - R_F) + 0.75 \beta(R_M - R_F)^{17}$$

<sup>16</sup> Morin, p. 175.

<sup>17</sup> Morin, p. 190.



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It is, after all, total risk which is reflected in market prices which the comparable risk, non-price regulated, companies were selected.

A. Yes, I have. As shown on Schedule DWD-5R, I have selected a proxy group of twelve non-price regulated companies that are comparable in systematic (measured by the unadjusted beta) and non-systematic (as measured by the standard error of the regression) risk as his water proxy group.

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**Q. What is the size-adjusted, corrected common equity cost rate indicated for Dr. Carlisle's water proxy group?**

**Q. Does that conclude your rebuttal testimony?**

<sup>19</sup> From Schedule DWD-1, page 2, line 6.

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